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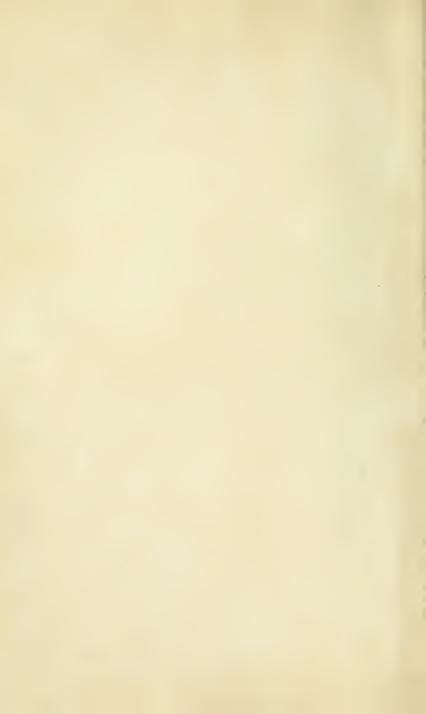




Landerdale's / The base of) Inquery into the Nature and Origin of Public Mealth, and in to the meuns and causes of its increase. Edin. 1816







AN

INQUIRY

INTO THE

NATURE AND ORIGIN

OF

Public Wealth,

AND INTO THE

MEANS AND CAUSES OF ITS INCREASE.

BY

THE EARL OF LAUDERDALE.

SECOND EDITION, GREATLY ENLARGED.

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TC

HIS ROYAL HIGHNESS THE PRINCE OF WALES.

SIR,

Ir gratitude for kindness uniformly shown me, did not point out your Royal Highness as the Person to whom I ought to inscribe any little effort of my industry; the anxious zeal which constantly animates your Royal Highness's breast, for the welfare of a People amongst whom, fortunately for the British Empire, you hold a station so illustrious and pre-eminent, would naturally suggest your Royal Highness, as the Person under whose Protection a Work ought to be placed, the object of which is to elucidate the elementary principles of a science, on which the Happiness as well as the Wealth of mankind depends.

I am, with the highest sense of duty, and most profound feeling of respect,

SIR,

Your Royal Highness's

Much obliged,

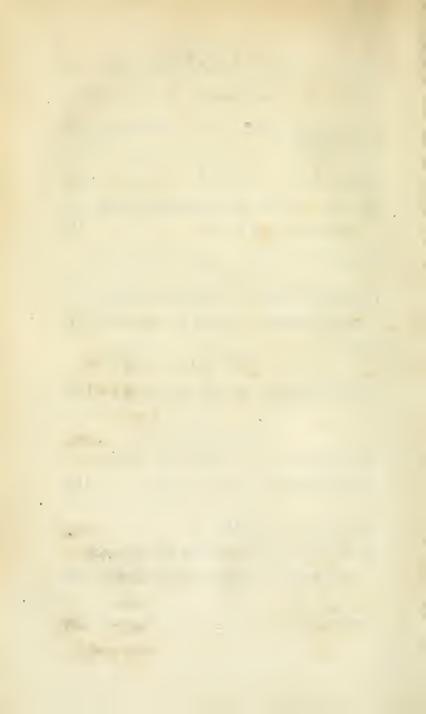
And most humble servant,

LAUDERDALE.

January 1804.

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ADVERTISEMENT.

It is now nearly fourteen years since the publication of the First Edition of this Inquiry; and, though the author is perfectly aware, that some of his speculations were then unfavourably received, he has, after a careful review of the opinions it contains, seen nothing essential he could wish to alter.

In the rectitude of most of his doctrines, he is indeed confirmed,—not only by the approbation with which they have been distinguished in France, in Germany, in Italy, and America,—but, because he perceives, that many of the opinions which,

in this country, at first excited doubt and hesitation, have gradually gained ground to such a degree, that, in most recent publications, they are assumed as indisputed and incontrovertible.

Labour is now no longer regarded as a measure of value;—it is, on the contrary, admitted, that nothing can possess the character of forming, at all times, and in all places, an accurate measure of value.

The distinction betwixt productive and unproductive labour,—as founded on the produce of labour being immediately consumed, or reserved for future use,—is exploded.

The origin and nature of the profit of capital is now universally understood: it is, by all, admitted, that capital derives its profits, either from supplanting a portion of labour which would otherwise be performed by the hand of man;—or, from its performing a portion of labour which is be-

yond the reach of the personal exertion of man to accomplish.

Parsimony has ceased to be regarded as the most active means of increasing public wealth;—and, though the author's opinions on this subject were formerly stated to be the most unmeasured and prejudiced of all his speculations, the greatest advocates for the system of forcing parsimony by legislative authority, in the shape of a sinking fund, now agree to the necessity of limiting the extent to which it ought to be carried. Hitherto, indeed, we have had no experience of the effects of the Sinking Fund, when not counteracted by borrowing to a greater extent:-yet there are many who admit the consequences, as stated in the Inquiry, of withdrawing such a portion of revenue from expenditure in consumable commodities, and forcibly converting it into capital.

The reader will, therefore, find, in this Edition of the Inquiry, no change in the

doctrines it contained. The Author certainly has made great alterations; but these are confined to the objects of giving a more distinct view of the effects of parsimony on public wealth, and of extending the illustrations of the various opinions he has submitted to the public on the Science of Political Economy.

July 1818.

INTRODUCTION.

Though language, from which proceeds the power of both recording and communicating our ideas, must be deemed the principal source of improvement in man; yet it has been suggested,* that he, " who con-" siders the errors and obscurity, the mis-"takes and confusion, that are spread in "the world by an ill use of words, will find "some reason to doubt whether language, " as it has been employed, has contributed " more to the improvement or hinderance " of knowledge:" and in truth, notwithstanding all the benefits we derive from it, it is certain that the careless and improper use of language often produces much misconception, even in the ordinary occurrences of life.

^{*} Locke on the Human Understanding, B. III. Ch. xi. sect. 4.

In all discussions, therefore, where accuracy is required, we cannot be too cautious in adopting terms of art, or technical forms of expression, without inquiring into the justness of that mode of reasoning from which they have derived their origin.

Words have been represented, and indeed are usually considered, as the transcript of those ideas which are in the minds of men.

Thus, when we find a phrase in general use, we are apt to regard it as conveying the common testimony of mankind in favour of that species of reasoning which at first sight appears to have suggested it; and adopt, from a suppossed idea of authority, opinions, which a little examination would make us reject. By such carelessness, men often become habituated to the common use of phrases and expressions, without having even called in question their propriety; and these, forming the basis of further reasoning, gave birth to ideas founded on a series of misconceptions, and consequently to new phrases and turns of expression that tend to perpetuate fallacies. It is by these means

that language has, in all sciences, been often found a most powerful supporter of prejudice, and a most active promoter of error.

Speculation in Political Economy unavoidably leads to this train of reflection; for there is no science so much exposed to this source of error. The subjects of many of the sciences, originating in the conceptions of the learned, are never treated of but by men of superior education and improved minds, whose language must of course partake of the accuracy of their ideas. But Public Economy, which professes to teach the means of increasing the wealth of a State, and of applying it to the most useful proposes, is of necessity, in all stages of society, a subject of discussion, even amongst the most vulgar and illiterate, whose rude and erroneous conceptions must naturally lead to expressions founded on inaccuracy, and pregnant with error.

A strong illustration of the effect which language has upon the tenor of economical reasoning, may be derived from considering the mercantile system of political

economy, so long prevalent, which taught us to estimate the progress of our wealth by the Balance of our Trade.

rested upon as a means of ascertaining the increase of opulence, one would have naturally thought, that the manner in which the merchant makes up his account of profit and loss, would have suggested itself as the method of estimating the national gain by foreign trade.

Thus, as Davenant observes, we would have been led to examine how much the returns imported are worth more than the commodities exported; and attributed to the nation so much gain as the value of the Imports exceeded that of the Exports.

But Money being, in its capacity of an instrument of commerce, the immediate means of procuring all the conveniences of life; whilst, as the practical measure of value, we are accustomed to estimate commodities by the quantity of money they will exchange for; *Money* and *Wealth* came to be used, not only in common language, as

synonymous; but, in the ideas of men, to get money became expressive of the only means of growing rich.

Habituated to this misapplication of language, and to the ideas they derive from it, the supporters of the mercantile system, making up the accounts of the public in a manner directly the reverse of that they would have followed in making up their own, rejoiced at the excess of the Exports over the Imports; concluding, that the difference must be received in Money, and conceiving that the commodities exported, were merely valuable as instruments to procure Money, which they alone regarded as wealth.

Though the prevalence of the mercantile system, for above a century, and many consequent errors in the reasonings of our economical writers, as well as in the system of European legislation, all arising out of the habit of conceiving Wealth and Money to be synonymous, form powerful illustrations of the effects of language in producing erroneous ideas in economical rea-

sonings; it is perhaps not the most fatal error introduced into the science of political economy by the same means.

The terms we use, in talking of the wealth of a nation, or of the riches of individuals, are in all languages exactly the same. They denote, that private riches are universally considered in no other light than as a portion of national wealth. The sum total of the riches of those who form the community, is thus regarded as necessarily conveying an accurate statement of the wealth of a nation; and this idea has become so universally prevalent, that, even by philosophers, exchangeable value has been announced as the basis of wealth. * An increase of the fortune of any member of the society, if not at the expence of any individual belonging to the same community, is uniformly deemed an augmentation of national wealth; and a diminution of any man's property, if not producing an increase of the riches of some of

^{*} See Physiocratie, Philosophie Rurale, and the works of all the Economists.

his fellow-subjects, has been considered as of necessity occasioning a concomitant diminution of national wealth: "For," says an eminent philosopher, " the capital of a so-" ciety, which is the same thing with that " of all the individuals who compose it, " can be increased only in the same man-" ner." *

That public wealth, however, ought not to be considered as merely representing the sum of individual riches, is undoubted; † and that much of obscurity, and

^{*} Smith's Wealth of Nations, Vol. I. p. 410, edit. in 4to.—'To the same purpose says Hecato the Rhodian, as represented by Cicero: "Sapientis esse, nihil contra mores, leges, in stituta facientem, hahere rationem rei familiaris; neque enim solum nobis divites esse volumus, sed liberis, propinquis, amicis, maximeque reipublicæ: singulorum enim facultates et copiæ, divitiæ sunt civitatis." De Off. L. iii c. 15.

[†] The words Wealth and Riches are, in common language, used as synonymous. There is no term by which we can design the Wealth of a Community, which is not equally applicable to the Riches of Individuals. In treating of private fortune, however, the word riches will be uniformly used; and in expressing public opulence, the word wealth. To be more distinct, Private or Individual will be generally prefixed to Riches, and Public to Wealth.

even of error, has existed in economical reasoning from confounding them, will be made apparent.

As a clear understanding of the relation which Public Wealth and Individual Riches bear to each other, appears of the highest importance, in securing accuracy in every subject that relates to the science of Political Economy; the first and second chapters of this Inquiry are therefore devoted to the consideration of the nature of Value, the possession of which alone qualifies any thing to form a portion of individual riches;—to an explanation of what Public Wealth is, and of what constitutes Individual Riches;—and to an examination of the relation in which they stand to each other.

The meaning annexed in this work to the phrase Public Wealth being thus explained, the third chapter contains an investigation of the Sources of Wealth, in which Land, Labour, and Capital, are separately treated of as the sources of wealth;—an opinion which, though it has been announced by

some, and hinted at by others, does not seem to have made on any other author so strong an impression as to be uniformly adhered to in the course of his reasonings.

An idea which has generally prevailed, (though it seems in itself a paradox,) that wealth may be increased by means by which it is not produced, in particular by parsimony, or deprivation of expenditure, has made it necessary to investigate this subject in the fourth chapter, as a preliminary to an Inquiry into the Means and Causes of the Increase of Wealth; which is the object of the fifth chapter.

CHAP. I.

OF VALUE, AND THE POSSIBILITY OF AN ACCU-RATE MEASURE OF VALUE.

Before proceeding to consider what constitutes public wealth and private riches, or to investigate the circumstances which lead to the increase of either, it is necessary to understand distinctly the nature of Value; and, by that means, to possess a clear idea of what it is which alone can give to any commodity the character it must acquire, in order to form a part of individual riches.

The term *Value*, whatever might have been its original sense, as it is used in common language, does not express a quality

inherent in any commodity. There is nothing which possesses a real, intrinsic, or invariable value. The possession of no quality, however important to the welfare of man, can confer value; for water, the most necessary of all things, seldom possesses it.

Experience shews us, that every thing is uniformly considered as valuable, which, to the possession of qualities that make it the object of the desire of man, adds the circumstance of existing in scarcity. To confer value, therefore, two things appear requisite: 1. That the commodity, as being useful or delightful to man, should be an object of his desire; 2. That it should exist in a degree of scarcity.

With respect to the variations in value, of which every thing valuable is susceptible, if we could for a moment suppose that any substance possessed intrinsic and fixed value, so as to render an assumed quantity of it constantly, under all circumstances, of equal value; then the degree of value of all things, ascertained by such a

fixed standard, would vary according to the proportion betwixt the quantity of them and the demand for them, and every commodity would, of course, be subject to a variation in its value from four different circumstances.

- 1. It would be subject to an increase of its value, from a diminution of its quantity.
- 2. To a diminution of its value, from an augmentation of its quantity.
- 3. It might suffer an augmentation in its value, from the circumstance of an increased demand.
- 4. Its value might be diminished, by a failure of demand.

As it will, however, clearly appear, that no commodity can possess fixed and intrinsic value, so as to qualify it for a measure of the value of other commodities, mankind are reduced to select, as a practical measure of value, that which appears the least liable to any of these four sources of variation, which are the sole causes of alteration of value.

When in common language, therefore, we express the *value* of any commodity, it may vary at one period from what it is at another, in consequence of eight different contingencies.

- 1. From the four circumstances above stated, in relation to the commodity of which we mean to express the value. And,
- 2. From the same four circumstances, in relation to the commodity we have adopted as a measure of value.

As the value, therefore, of all commodities depends upon the possession of a quality that makes them the object of man's desire, and the circumstance of their existing in a certain degree of scarcity; it follows that the variation of all value must depend upon the alteration of the proportion betwixt the demand for, and the quantity of, the commodity, occasioned by the occurrence of one of the four circumstances above stated; and that a variation in the expression of value, may be occasioned by the occurrence of any of the eight circumstances we have alluded to. The truth of

these propositions may be variously illustrated.

Water, it has been observed, is one of the things most useful to man, yet it seldom possesses any value; and the reason of this is evident: it rarely occurs, that to its quality of utility is added the circumstance of existing in scarcity; but if, in the course of a siege, or a sea-voyage, it becomes scarce, it instantly acquires value; and its value is subject to the same rule of variation as that of other commodities.

Gold is nowhere to be found in abundance; but scarcity alone cannot give it value, any more than utility alone can confer value on water. We are accordingly told, that the poor inhabitants of Cuba and St Domingo, when first discovered by the Spaniards, not knowing the use of gold, considered it as little bits of pebble, just worth the picking up, but not worth the refusing to anybody that asked it; and that they in reality gave it to their new guests at the first request.* But the know-

^{*} Wea'th of Nations, Vol. I. p. 219, 4to edit.

ledge of its utility by the Spaniards, and its possessing therefore qualities, that to them made it an object of desire, added to the circumstance of its scarcity, soon gave it value; and the degree of its value came speedily to be fixed, even in the minds of the natives, on the same principle as that of food, and of all other commodities.

Though the scarcity of gold and silver, and the demand for them, have made them what is called most precious, that is, under the general circumstances of mankind, commodities of the greatest value; yet particular circumstances may occasion such a scarcity of, and demand for, things of a very ordinary nature, as to make them for a time of a value superior even to those metals. Thus, as Mr Locke well observes, in a man of war, silver may not be of equal value to gunpowder, and a famine may certainly occasion gold's not being worth its weight in bran.

The value of every thing is so completely dependent upon the proportion betwixt the demand for it and the quantity of it,

that the possession of no quality, whatever excellence it might add to a commodity, could produce any material alteration in its value, if it did not affect either the demand for it, or the quantity of it. Supposing there could be conferred on Corn, the important attribute, that one grain, when given to an infant on the day of its birth, should secure a century of robust health; (though it is certain there could not be added to it a qualification more to the general taste of mankind,) yet, as this would produce no alteration in the quantity of grain, and, from the small quantity that would be thus consumed, hardly any perceptible increase in the demand for it, we should not be able to discern any variation in its value.

So little has the quality of things to do with their value, that it very often happens, when a commodity possesses, in the highest degree of perfection, all the qualities which make it desirable, its value is the lowest; and when, on the contrary, it possesses them in a very inferior degree, its value is the highest. This is almost constantly the case with Grain. In a fine season it is always of a superior, in a bad season of an inferior quality; yet, as the fine season generally produces an increased, and a bad season a diminished quantity; with a thorough contempt of the quality, the value of the corn is always regulated on the principle here stated; and the greatness of the quantity, though of a superior quality, reduces its value; whilst the diminution of its quantity, though of very inferior quality, increases the value in the market.

The value of Cattle, though the recommendations with regard to breed, fatness, and every other quality that renders them desirable, and even the number of them should remain unaltered, is always found to vary in proportion to the scarcity or abundance of the food on which they are nourished. The value of certain inferior species of grain is also often increased, without any alteration either of the quantity or quality of it, but merely in consequence of an augmentation of demand, arising from a

scarcity of the better sorts of grain, which usually form the bread of the community.

We have often occasion to observe that, whilst a web of cloth or a piece of silk have sold at very considerable prices, if there remains a small quantity of them, this Remnant, as it is called, brings a very inferior price to what was given for the greater part of the same cloth, and of the same piece of silk. On the other hand, a small quantity of stock, in the 3 or 4 per cents, is uniformly sold in the Alley above the market-price of the commodity; and yet the small pieces of silk and cloth are of the same quality with the whole of the respective webs, and the stock is exactly productive of the same advantages with any other portion of stock; the variations depending, in these cases, totally upon alterations in the degree of demand; there being few people who wish for so small a piece of cloth, and many who, in consequence of wills and trusts, are obliged to purchase smaller portions of stock for accumulation than are usually exposed in the market.

Thus we may perceive, that the existence of value is perfectly independent of any inherent characteristic in the commodity itself; that there is no such thing as intrinsic value; and that alterations in the degrees of value are not dependent upon any change of quality, but always on some change of proportion betwixt the quantity and the demand for a commodity; -- a sure proof of which is, that we cannot express value, or a variation of value, without a comparison of two commodities; and every variation in the expression of value, must depend upon some alteration in the proportion betwixt the quantity of and demand for, one or other of the commodities compared.

For example, if the price of grain is to be expressed in silver, it might vary, in consequence of the circumstance of the alteration of the proportion betwixt the quantity of the grain and the demand for it; it might also alter, in consequence of the variation betwixt the proportion of silver and the demand for it. It may happen, too, that alterations might take place in both those

proportions; which must likewise generally produce a variation in the expression of value. For though it is possible that there should exist alterations in both, and that the relative proportion betwixt the quantity and demand for each should still be preserved, yet it is highly improbable, that, uhder such circumstances, this equilibrium should be maintained.

The opinions, that are here stated, concerning the nature and the causes of the variation of value, are nowise new. They have been hinted at by many; and by some they have been long ago explained with tolerable accuracy.* They do not, how-

^{*} The following extract, from Mr Law's Treatise on Money, published in Scotland in 1705, seems to convey an accurate idea of the nature of value. "Mr Locke says," the "value of goods is according to their quantity, in proportion to their vent. The vent of goods cannot be greater than the quantity, but the demand may be greater. If the quantity of wine brought from France be 100 ton, and the demand be for 500 ton, the demand is greater than the vent, and the "100 ton will sell at a higher price than if the demand were only equal to the vent; so the prices of goods are not accerding to the quantity in proportion to the vent, but in pro-

ever, appear to have been so clearly understood as to destroy the idea of any thing possessing a real and fixed value, so as to qualify it to form a measure of value. After this philosopher's stone many have been in search; and not a few, distinguished for their knowledge and their talents, have imagined that in Labour they had discovered what constituted a real measure of value. Of this fancy Sir William Petty's mind seems to have been fully possessed, when he composed the following passage: " Suppose a man could, " with his own hands, plant a certain scope " of land with corn; that is, could dig or " plough, harrow, reap, carry home, thresh, " and winnow, so much as the husbandry " of this land requires, and had withal seed " wherewith to sow the same. I say, that "when this man hath subducted his seed " out of the proceed of his harvest, and " also what himself hath both eaten and

^{*} Treatise of Taxes and Constitutions, p. 23, 4to edit. 1667.

"given to others in exchange for clothes, and other natural necessaries, that the remainder of corn is the natural and true rent of the land for that year; and the medium of seven years, or rather of so many years as make up the cycle, within which dearths and plenties make their revolution, doth give the ordinary rent of the land in corn.

"But a further, though collateral que-" stion may be, How much English money "this corn or rent is worth? I answer, so " much as the money which another single " man can save within the same time, over "and above his expence, if he employed "himself wholly to produce and make it; "viz. Let another man go travel into a "country where is silver, there dig it, re-" fine it, bring it to the same place where "the other man planted his corn, coin it, " &c.; the same person, all the while of " his working for silver, gathering also food " for his necessary livelihood, and procur-"ing himself covering, &c. I say the sil"ver of the one must be esteemed of equal value with the corn of the other."

The same idea is stated by Mr Harris, in his ingenious Essay on Money and Coins: "The values of land and labour do, as it "were of themselves, mutually settle or adjust one another; and as all things or commodities are the products of those two, so their several values are naturally adjusted by them. But, as in most productions, labour hath the greatest share, the value of labour is to be reckoned the chief standard that regulates the value of all commodities; and more especially, as the value of land is, as it were, already allowed for in the value of labour itself."

The Author of the Inquiry into the Wealth of Nations, is, however, the person who has struggled most to establish the opinion, that labour may be considered as an accurate measure of value; and Baron Hertzberg, who, in his Discourse on the Wealth of Nations, has declared that it is admirably proved in the profound and classical work of Dr Smith, that labour is

the true, universal and exact measure of the value of all goods and merchandise, is not the only distinguished disciple who has maintained this doctrine.

That this opinion is unfounded, is nevertheless apparent from the circumstance, that value cannot be expressed but by a comparison of two commodities: whereas it is evident, if there existed any thing qualified to form a measure of value, that degrees of value could be denoted by different portions of such a commodity, without the necessity of any comparison.

Indeed, it is the effect, that the belief in the existence of an accurate measure of value must have in destroying all just idea of the nature of value, and the authority of those who have held this doctrine, rather than the ingenuity or even plausibility of the manner in which it is supported, that makes it worthy of consideration.

To those who understand any thing of the nature of value, or on what its variations depend, the existence of a perfect measure of value must at once appear impossible: for as nothing can be a real measure of magnitude and quantity, which is subject to variations in its own dimensions, so nothing can be a real measure of the value of other commodities, which is constantly varying in its own value. But as there is nothing which is not subject to variations, both in its quantity and in the demand for it, there can be nothing which is not subject to alteration in value.

In the learned work, however, alluded to, the author, without descending to any reasoning, qualifies labour for sustaining the character of a measure of value, by declaring, that "labour alone never varies in "its own value."* And this appears more extraordinary, because labour is the thing most subject to variation in its value, and is of course, of all others that could have been selected, the worst calculated to perform that duty.

As, however, nothing else has ever been held out as constituting an accurate measure of value; and as the opinion still has

^{*} Wealth of Nations, Vol. I. p. 38. 4to edit.

its advocates, that labour is such, though completely destructive of every correct view of the nature of value, it is perhaps worth while, in order to extinguish the idea of the possibility of its forming an accurate measure of value, shortly to prove that, of all things, it is the least qualified for this task, by references to what seems the least suspicious authority,—opinions delivered in that very work, which declares labour to possess fixed and invariable value; and which has been affirmed to contain substantial proof that labour is a real measure of value.

Things may alter in their value:

- 1. At periods not remote; as for example, of the same year.
 - 2. At remote periods of time,
- 3. In different countries.
- 4. In different parts of the same country.

These may be generally considered as the four cases which give rise to alterations in the value of all commodities; for, generally speaking, there is nothing subject to variation of value at the same time, and in the same place. Labour, however, it will appear, in the opinion of the learned author, who styles it the sole thing invariable in its value, is subject not only to all the usual sources of variation, but possesses exclusively the characteristic of varying at the same time and place.

1. That labour varies in its value at different periods of the same year, every person must know, who has observed, that "the demand for country labour is greater at hay-time and harvest, than during the greater part of the year: and wages rise "with the demand. In time of war, when forty or fifty thousand sailors are forced from the merchant service into that of the King, the demand for sailors to merchant ships necessarily rises with their scarcity, and their wages, upon such occasions, commonly rise from a guinea and seven and twenty shillings, to forty shillings and three pounds a month *."

^{*} Wealth of Nations, Vol. I. p. 140, 4to edit.

2. That labour varies in its value at distant and remote periods of time, seems established by the following facts: "The "real recompence of labour, the real quantity of the necessaries and conveniencies of life which it can procure to the lambourer, has, during the course of the present century, increased perhaps in a "still greater proportion than its moncy-"price."*

And, again, "The money-price of labour "in Great Britain has indeed risen during "the course of the present century. This however, seems to be the effect, not so "much of any diminution in the value of "silver in the European market, as of an "increase of the demand for labour in Great Britain, arising from the great, and al-"most universal, prosperity of the coun-"try." †

3. The comparison made betwixt England and America, shows clearly the difference that takes place in the value of

^{*} Wealth of Nations, Vol. I. p. 95, 4to edit.

⁺ Ibid. Vol. I. p. 251, 4to edit.

labour in distant and remote countries: " England is certainly, in the present times, " a much richer country than any part of " North America. The wages of labour, "however, are much higher in North "America than in any part of England. "In the province of New York, common "labourers earn three shillings and six-" pence currency, equal to two shillings "Sterling a day; ship-carpenters ten shil-" lings and sixpence currency, with a pint " of rum, worth sixpence Sterling, equal in " all to six shillings and sixpence Sterling; "house-carpenters and brick-layers eight " shillings currency, equal to four shillings " and sixpence Sterling; journeymen tailors " five shillings currency, equal to about two-" shillings and tenpence Sterling. These " prices are all above the London price; " and wages are said to be as high in the " other colonies as in New York. The " price of provisions is every where, in " North America, much lower than in " England. A dearth has never been known there. In the worst seasons,

"they have always had a sufficiency for "themselves, though less for exportation. "If the money-price of labour, therefore, "be higher than it is any where in the "mother country, its real price, the real "command of the necessaries and con-" veniencies of life which it conveys to "the labourer, must be higher in a still " greater proportion." * Further, "Labour "in America is so well rewarded, that a "numerous family of children, instead " of being a burden, is a source of opu-"lence and prosperity to the parents. "The labour of each child, before it can "leave their house, is computed to be "worth L. 100 clear gain to them. A " young widow, with four or five young "children, who among the middling or "inferior ranks of people in Europe, "would have so little chance for a second "husband, is there frequently courted as " a sort of fortune." †

[•] Wealth of Nations, Vol. I. p. 85. 4to edit. † Ibid. Vol. I. p. 65. 4to edit.

4. The following facts not only shew the extraordinary variations in the value of labour, that take place in different parts of the same country; but the ingenious reasoning, which accompanies it, points out why these variations on the value of labour must be more permanent than in any other commodity. " Eighteen pence a day may " be reckoned the common price of labour " in London and its neighbourhood. At a " few miles distance it falls to fourteen and "fifteen pence. Ten pence may be rec-"koned its price in Edinburgh and its " neighbourhood. At a few miles distance " it falls to eight pence, the usual price of " common labour through the greater part " of the low country of Scotland, where it " varies a good deal less than in England. "Such a difference of prices, which it " seems is not always sufficient to trans-" port a man from one parish to another, "would necessarily occasion so great a " transportation of the most bulky commo-"dities, not only from one parish to ano-"ther, but from one end of the kingdom, "almost from one end of the world, to the other, as would soon reduce them more nearly to a level. After all that has been said of the levity and inconstancy of human nature, it appears evidently from experience that a man is of all sorts of luggage the most difficult to be transported."*

Thus labour seems to partake of those four sources of variation, which are the general reasons of alteration in the value of all commodities. But this is not all: for this pretended accurate measure of value is not capable even, like other commodities, of forming a true measure of value at the same time and place; which is evident, when we recollect, that, "at "the same time and place, the real and the "nominal price of all commodities are ex-" actly in proportion to one another. The "more or less money you get for any commodity, in the London market, for ex-" ample, the more or less labour it will at

^{*} Wealth of Nations, Vol. I. p. 91. 4to edit.

"that time or place enable you to purchase or command. At the same time and place, therefore, money is the exact measure of the real exchangeable value of all commodities." Whereas, on the other hand, it must be observed, that the value of labour "cannot be ascertained very acturately any where, different prices being often paid at the same place, and for the same sort of labour, not only according to the different abilities of the workmen, but according to the easiness or hardness of the masters.

Now, the variation here pointed out must be in the real value of labour, and not in that of the money by which we express its value; because money, at the same time and place, forming an exact measure of the exchangeable value of all commodities, cannot, under such circumstances, vary in its own value.

It is, indeed, most extraordinary, that

^{*} Wealth of Nations, Vol. I. p. 44. 4to edit.

[†] Ibid. Vol. I. p. 94.

the author of the Wealth of Nations should ever have considered labour as an accurate measure of value; for in Book II. Chap. iii. of his work, he treats of productive and unproductive labour, and therein announces an opinion, which forms one of the most striking features of his theory, that a great portion or description of labour is totally unproductive: yet it is evident, that a proposition, holding forth a mathematical point as a measure of dimension, would not be more absurd than proposing any thing unproductive as a measure of value.

To avoid this apparent contradiction, it has been supposed, that the characteristic of being a measure of value was meant to be confined to that species of labour which the author, throughout his work, has called productive labour: but in stating even productive labour to be a measure of value, he must for the moment have forgot the subject of his first book, which treats of the improvement of the productive powers of labour as the effect of the division of labour.

For if, according to the theory there detailed, the productive powers, that is, the value of labour, is continually improving, and exists in different states of improvement, in proportion as it is subdivided, with what consistency can it be said, that labour, supposing it to be limited to productive labour, "never varies in its own "value, and forms the ultimate and real "standard by which the value of all commodities can, at all times and places, be "estimated and compared?"

Great, therefore, as the authorities are who have regarded labour as a measure of value, and who by so doing have contradicted that view of the nature of value which has been here given, it does not appear that labour forms any exception to the general rule, that nothing possesses real, fixed or intrinsic value; or that there is any solid reason for doubting the two general principles we have endeavoured to establish:—

1. That things are alone valuable in consequence of their uniting qualities, which make them the objects of man's desire, with

the circumstance of existing in a certain degree of scarcity.

2. That the degree of value which every commodity possesses, depends upon the proportion betwixt the quantity of it and the demand for it.

CHAP. II.

OF PUBLIC WEALTH, OF INDIVIDUAL RICHES, AND OF THE RELATION THEY BEAR TO EACH OTHER.

Though the advantages which all reasonings on Political Economy must have derived from a clear explanation of what constitutes national or public wealth are apparent; and though a precise understanding of what wealth is, seems a necessary preliminary to the discussing, with any degree of accuracy, the means of increasing it; we must regret, that a definition of Public Wealth is no where to be found. This deficiency, however, does not appear to have proceeded so much from any sense of difficulty in defining national wealth, or in describing wherein it is conceived to consist, as from a general feeling of its being

needless to express that about which all men are agreed. For the theories and opinions of all speculative writers sufficiently shew, that they have entertained, on this subject, the same ideas with those who, in the exercise of the practice of taxation, have been obliged to express their opinions more distinctly.

The capital of a society has been regarded, in every respect, as the same with that of all the individuals who compose it; * and the sum-total of the fortunes of individuals, has been conceived to convey an accurate description of the mass of national wealth. Parsimony, which experience teaches us is the most usual means of increasing private fortune, is universally represented as the parent of public wealth. Frugality is said to increase, prodigality to diminish, the public capital. † Every prodigal is represented as a public enemy, and every frugal man as a public benefactor. ‡

^{*} Wealth of Nations, Vol. I. p. 409, 4to edit.

[†] Wealth of Nations, Vol. I. p. 421, 4to edit.

[‡] Ibid. Vol. I. p. 414.

So much, indeed, is public wealth universally deemed the same thing with the mass of private riches, that there appears no means of increasing the fortune of an individual, when it is not done directly at the expence of another, that is not regarded as productive of national opulence.

On this principle have proceeded the various statements of national wealth, which have at different times been submitted to the public. Thus, by Sir William Petty's computation, in the year 1664, the total wealth of the nation, consisting of lands, houses, shipping, gold and silver coin, wares, merchandise, plate, furniture, &c. amounted to two hundred and fifty millions. In the beginning of the eighteenth century, Gregory King computed the landed and personal property at six hundred and fifteen millions. Mr Hooke computed the whole value of real and personal property, about fifty years ago, at two thousand one hundred millions sterling. Sir William Pulteney, about thirty years after, valued the landed and personal property at two thousand millions. The total amount of the wealth of Great Britain, consisting of the value of articles above enumerated, has also been computed by Dr Beeke, to be nearly two thousand five hundred millions sterling, exclusive of one hundred millions sterling, the value of foreign possessions belonging to the subjects of Great Britain.*

* The principles on which these calculations of national wealth proceed, are fully explained in the 90th paragraph of Turgot's work, entitled, Reflexions sur la formation et la distribution des Richesses.—" § 90. La Richesse totale d'une na" tion est composée, 1° du revenu net de tous les biens fonds multiplié par le taux du prix des terres; 2° de la somme de " toutes les richesses mobilieres existantes dans la nation.

" Les biens-fond équivalent à un capital égal à leur revenu " annuel, multiplié par le denier courant, auquel les terres se " vendent. Ainsi si l'on additionnoit le revenu de toutes les " terres, c'est-à-dire, le revenu net qu'elles rendent aux pro-" priétaires et à tous ceux qui en partagent la propriété, com-" me le seigneur qui perçoit une rente, le curé, qui perçoit la " dixme, le souverain, qui perçoit l'impot: si, dis-je, additionnoit " tontes ces sommes et qu'on les multipliat par le taux au-" quel se vendent les terres, on auroit la somme des richesses " d'une nation en biens-fonds. Pour avoir la totalité des ri-" chesses d'une nation, il faut y joindre les richesses mobili-" eres, qui consistent dans la somme des capitaux employés dans toutes les enterprises de culture, d'industrie, et de com-" merce, et qui n'en sortent jamais, toutes les avances en toute " genre d'enterprise devant sans cesse rentrer aux entrepre-" neurs, pour être sans cesse reversées dans l'enterprise, qui " sans cela ne pourroit être continuée."

It is, however, impossible to subscribe to the idea, that the sum-total of individual riches forms an accurate statement of public wealth. Though the opinion has been universally prevalent, it must be deemed false and unfounded by every man who considers the subject, after having formed, and familiarized himself to, an accurate and distinct opinion of the nature of value.

It must, then, appear, that a commodity being useful or delightful to man, cannot alone give it value; that to obtain value. or to be qualified to constitute a portion of private riches, it must combine with that quality, the circumstance of existing in a certain degree of scarcity. Yet the common sense of mankind would revolt at a proposal for augmenting wealth by creating a scarcity of any commodity generally useful and necessary to man. For example, let us suppose a country possessing abundance of the necessaries and conveniences of life, and universally accommodated with the purest streams of water:-what opinion would be entertained of the under-

standing of a man, who, as the means of increasing the wealth of such a country, should propose to create a scarcity of water, the abundance of which was deservedly considered as one of the greatest blessings incident to the community? It is certain, however, that such a projector would, by this means, succeed in increasing the mass of individual riches; for to the water, which would still retain the quality of being useful and desirable, he would add the circumstance of existing in scarcity, which of course must confer upon it value; and, when it once obtained value, the same circumstances that fix the value of its produce for a certain number of years, as the price of the possession of land which produces food, would equally fix the value of the produce of springs for a certain number of years, as the price of the possession of that which produced drink; and thus the individual riches of the country would be increased, in a sum equal to the value of the fee-simple of all the wells.

But further to illustrate this proposition,

that public wealth, and the mass of individual riches, cannot be regarded as in every respect the same, let us for a moment suppose it possible to create as great an abundance of any species of food as there exists of water; what would be thought of the advice of a man, who should cautiously recommend, even at the moment of the pressure of scarcity, to beware of creating this boasted abundance? for, however flattering it might appear as a remedy for the immediate evil, it would inevitably diminish the wealth of the society. Yet ridiculous as this opinion might appear, as every thing, which partakes of the abundance of water or air, must at once cease to possess value; it follows that, by occasioning such an abundance, the sumtotal of individual riches would most certainly be diminished, to an extent equal to the total value of that species of food, whose value would by this means be destroyed.

When we reflect on the situation of this country, it appears, indeed, almost self-evident, that the sum-total of individual riches

cannot be considered as affording an accurate statement of public wealth.

At present the capital of the national debt amounts nearly to five hundred millions. We have seen, and know, that war, even in the course of the first year, may sink the value of this capital twenty per cent.; that is, that it may diminish the mass of individual fortunes one hundred millions; and thus impose upon any man, who made up the account of public wealth, on the principle that an accurate statement of it was to be derived from adding together the fortunes of individuals, the necessity of saying, that one hundred millions of our wealth had vanished.

But this is not all. The value of many things sinks at the same time. In the value of land, in particular, we have seen a considerable diminution, which would create the necessity of a further reduction in this statement of public wealth. Yet the surface of the national territory remains unaltered; the landlord receives the same rent; the stockholder is paid

the same interest; and there is no one thing, on which a man can lay his hand as an article of national wealth, which does not appear to retain the same qualities that rendered it either useful or desirable, and to be in every respect unaltered.

It seems, therefore, apparent, that an increase in the mass of individual riches does not necessarily increase the wealth of the community; that it is possible to imagine a very important increase of public wealth, which must diminish the mass of individual riches; and that the practice of considering the sum-total of individual riches, as calculated to convey an accurate idea of the wealth of a society, must be regarded as erroneous.*

Indeed, a little further consideration

^{*} The following passage from the Abbé Morellet's Prospectus de nouveau Dictionnaire du Commerce, page 204, shews that he must have felt the distinction, though he had not, at that time, formed a distinct idea of the data on which the wealth of a community ought to be calculated.

[&]quot;Puisque les richesses sont l'objèt du commerce, et en gé-"néral de l'économie politique, on voit que le tableau du com-"merce de chaque etat devoit présenter l'énumération de ses

makes it evident, that, if we could suppose Nature to bestow on any community, or Art to procure for them, such an abundance, that every individual should find himself in possession of whatever his appetites could want, or his imagination wish or desire, they would possess the greatest possible degree of wealth; though, under such circumstances, it is impossible that any commodity could obtain the attribute of value: for, like water and air, all commodities, that partake of their abundance, must at once be divested of value, or of the possibility of constituting any part of individual riches. The inhabitants of a country thus abounding in all that man can desire,

[&]quot;richesses. Mais cette énumération parôit avoir de grandes difficultés. On ne connoit pas bien les élémens de cette espece de calcul, et l'on ignore peutêtre encore l'art d'em- ployer ceux qu'on a."

The principles on which the calculation of the wealth of a community ought to proceed, are as evident as it is clear, that the sum-total of individual riches must give a fallacious representation of public wealth. The sum-total of individual riches, can convey only the value of all things belonging to the community, that have value in exchange. The wealth of a country, on the contrary, consists in the abundance of what is useful or delightful to man.

would, without the possibility of possessing riches, enjoy all the wealth and comforts which the largest fortunes can secure. Diminish this supposed abundance, it is obvious you will impoverish the community; but you will, by such diminution, infallibly confer value on the commodities used or desired by man, and, of course, create individual riches. Subsequent, however, to this diminution, which occasions the existence of riches, those who remain possessed even of the largest fortunes, cannot enjoy a greater quantity of the objects of their desire, than the community at large possessed, in that supposed state of society where abundance precluded the existence of value, and, of course, the possibility of individual riches. *

Important as this distinction, which we have endeavoured to establish, between the

^{*} Though the opinions entertained by the economists lead them uniformly to confound Wealth and Riches, it being their principle, quelavaleur vénule est la base de toute richesse, que son accroissement est accroisement de richesses, (Philosophie Rurale, p. 60. "That value in exchange is the basis of wealth, and that the "increase of price is an increase of wealth;" yet there are passages in their writings, which evidently shew, that the distinction betwixt wealth and riches had occurred to them; for

wealth of a nation, and the sum-total of the riches of individuals, will afterwards appear to be, in regulating our opinions on every

example: "It is necessary to distinguish wealth from riches." The former possesses value in use, but no value in exchange. "The latter possesses a value both in use and exchange. It is "not sufficient for a nation to possess wealth; it is necessary it should endeavour to procure great riches, in order to administer, by means of commerce, to the desires of all the "members of which it is composed." *Physiocratie*, p. cxviii. (For the original see Appendix, No. I.)

The same distinction is alluded to in Child's Discourse on Trade, as well as in other works on that subject.

"I shall conclude with two or three requests to the reader.

"3. That in all his meditations upon these principles, he

"would warily distinguish between the profit of the merchant,

and the gain of the kingdom, which are so far from being al
"ways parallels, that frequently they run counter one to the

other, although most men, by their education and business,

having fixed their eye and aim wholly upon the former, do

usually confound these two in their thoughts and discourses

of trade, or else mistake the former for the latter." Preface

"The state on some occasions may gain most, when private men by their resources get least." England's Treasure by Foreign Trade, p. 11. Glasgow edition, printed 1755.

to Child's Discourse on Trade, 4th edition, p. 40.

"For all men do consent, that plenty of money in a kingdom doth make the native commodity dearer, which, as it is to the profit of some private men in their revenues, so is it directly against the benefit of the public." Ib. p. 25-

"The merchants knew perfectly well in what manner to "enrich themselves. It was their business to know it. But "to know in what manner it enriched the country, was no "part of their business." Wealth of Nations, Vol. II. p. S, 4to edit. question relating to the science of Political Economy; it is perhaps still more important to observe, that, in proportion as the riches of individuals are increased by an augmentation of the value of any commodity, the wealth of the society is generally diminished; and in proportion as the mass of individual riches is diminished, by the diminution of the value of any commodity, its opulence is generally increased.

No man can doubt that an abundance of grain is a most important article of wealth. As little can it be doubted, that a scarcity of grain is a most serious symptom of poverty; yet we are told, by great authority, * that a defect in the harvest will raise the price of corn in the following proportions:

- 3. Tenths, $\left\{\begin{array}{c} \overline{z} \\ \overline{z} \end{array}\right\}$ 1.6 Tenths.
- 4. Tenths, 2.8 Tenths. 5. Tenths, 4.5 Tenths.

^{*} Gregory King's Calculation, published by Davenant, Vol. II. p. 224.

According to this opinion, therefore, a deficiency of three-tenths of the common produce of the country in grain, would increase the value of the grain that remained 160 per cent.; that is, suppose the usual produce of any country to be 300 quarters of grain, and the total value of that grain to be L. 300; if the grain was reduced threetenths in quantity, viz. to 210 quarters, then the value of these 210 quarters would be L. 546. Thus the wealth of the community being diminished by the loss of three-tenths of the whole of its produce of grain, the value of its grain would thereby be increased from L. 300 to L. 546; and there would, by that means, be added to the mass of individual riches, a sum nearly equal to the value which the whole grain of the country bore when no such scarcity existed.

On the other hand, it is conjectured by authority equally respectable, * that the production of one-tenth part more grain

^{*} See Spectator, No. 200.

than is usually consumed, would diminish the value of the grain one-half; that is, that if the produce of a country was 300 quarters, and its general value L. 300, if the wealth of the society should be increased by the production of 30 more quarters of grain, then the mass of individual riches would be diminished L. 135, as the value of the 330 quarters, at 10s. a quarter, would only amount to L. 165; whereas the value of the 300 quarters, before the produce was increased, at 20s. a quarter, amounted to L. 300. *

^{*} That the diminution of the quantity has the effect of raising the value for which the total of any commodity sells at the market; and the increase, the effect of diminishing it; is an observation made by many writers, though they disagree about the ratio in which it is increased and diminished. Thus, "Merchants observe, that if the commodity in market is diminished one-third beneath its mean quantity, it will be "nearly doubled in value; and that if it is augmented one-third above its mean quantity, it will sink near one-half in its value; and that, by further diminishing or augmenting the quantity, these disproportions between the quantity and prices vastly increase." Considerations on the Policy of Entails, by Sir John Dalrymple, p. 14.

[&]quot;People who understand Trade, will readily agree with me, that the tenth part of a commodity in a market, more than there is a brisk demand for, is apt to lower the market, per-

So truly is this principle understood by those whose interest leads them to take advantage of it, that nothing but the impossibility of general combination protects the public wealth against the rapacity of private avarice; for, wherever combination has been possible, mankind have found, in the diminution of their wealth, the fatal effects of this disposition. It is on this principle, that the Dutch were said to burn a considerable quantity of spiceries, whenever mankind was favoured with a fertile season; and that they gave to the natives of the several islands premiums for collecting the young blossoms and green leaves

[&]quot;haps 20 or 30 per cent., and that a deficiency of a tenth part will cause as exorbitant an advance." Speech without Doors, addressed to the National Creditors, 1737, p. 13.

[&]quot;Another circumstance appears to have escaped the notice "of the memorialists, namely, that, in proportion as the quan-"tity of goods increases, the price or value will diminish."

[&]quot;The week following the arrival of the Ganges, the com"pany's raw silk was sold, but for L. 20,000 less than what
"the silk would have sold for, if the ship had not arrived,
"and it has frequently happened, that the company have sus"tained immense losses, in consequence of offering to sale a
"very small quantity of goods, more than what the demand
"required." Memorial for the East India Company to the
Treasury.

of the nutmeg trees, by which means they destroyed them. It was a similar motive that, in the year 1731, induced the proprietors of the old vineyards in France, to solicit an order in Council, which they obtained, prohibiting both the planting of new vineyards, and the renewal of those old ones, of which the cultivation had been interrupted for two years, without a particular permission from the King, to be granted only in consequence of information from the Intendant of the province, certifying that he had examined the land, and that it was incapable of any other culture. The same idea led the tobacco-planters in Virginia to pass an act of Assembly, by which they restrained the cultivation of tobacco to 6000 plants for every negro kept; and afterwards induced them to agree, in plentiful years, to burn a certain proportion of tobacco for every negro.

Further to illustrate this doctrine, let us suppose a country whose annual productions, that is, whose revenue, amounted in value to fifty thousand pounds, in which, when all the various articles produced bore their usual proportions to one another, the grain was in quantity twenty thousand quarters, and in value twenty thousand pounds, and, of course, the value of the other commodities thirty thousand.

Let us also suppose, that the market price of all things producing revenue should, on an average, be twenty-five years' purchase of the value of the revenue produced; of course, the total wealth of such a country, estimated in the method Mr King and others have pursued, would amount to twelve hundred and fifty thousand pounds.

If, in such a country, there was a sudden diminution of production, to the extent of one half of the usual quantity of grain, it would, according to Davenant, add fivetenths to the value of the grain in the market, * there would therefore exist ten thousand quarters of grain, the value of which would be fifty-five thousand pounds.

That, under these circumstances, the grain could not be acquired by giving other

^{*} Davenant's Work, Vol. II. p. 224.

articles of production in exchange for it, is manifest, because the hypothesis assumes, that all the other commodities produced were only worth thirty thousand pounds, and many parts of them must, of course, be exchanged by the consumers for one another.

Such an unfortunate situation must therefore involve the necessity of part of the produce in grain being paid for by the consumers, giving in exchange for things produced a proportion of what may be called capital, in the general sense of the word, as opposed to revenue.

It is needless to enter into any minute calculation, of what would be the probable amount in value of the capital that would, under such circumstances, be transferred to the growers of grain, in payment of their commodity, over and above their usual share of the other annual productions. Let us suppose that it might be equal in value to thirty thousand pounds; though most probably it would be more, from the circumstance that an augmenta-

tion in the value of grain must occasion such a diminution in demand for all other articles, as would infinitely lower their value.

On this supposition, the value of the whole production would amount to eighty thousand pounds; composed of fifty thousand, being the augmented value of grain, and twenty-five, the reduced value of all other commodities.

But if the withdrawing ten thousand quarters of grain from the annual production, might add thirty thousand pounds to the value of these productions, this increased revenue, estimated as formerly at twenty-five years' purchase, would make the sum of national wealth amount to two millions: an apparent augmentation of seven hundred and fifty thousand, produced by a diminution of the quantity of grain, and, of course, of the aggregate of commodities, in which public wealth undoubtedly consists.

From these considerations, it seems evident, not only that the sum-total of indivi-

dual riches cannot be considered as an accurate description or definition of the wealth of any community; but that, on the contrary, it may be generally affirmed, that an increase of riches, when arising from alterations in the quantity of commodities, is always a proof of an immediate diminution of wealth; and a diminution of riches, is evidence of an immediate increase of wealth: and this proposition will be found invariably true, with the exception of a single case, which will be afterwards explained. Thus, it becomes necessary to adopt a definition of Public Wealth, which conveys a different idea of it from that which has been generally received; and it is therefore submitted, that Wealth may be accurately defined,—to consist of all that man desires, as useful or delightful to him. *

^{*} In the Projet d'une dixme Royale, published in the name of the Marechal De Vauban, and generally conceived to be his work, (though Voltaire, in his Doutes sur le testament du Cardinal de Richelieu, says it was written by M. de Bois Guilbert,) Wealth is nearly accurately defined in the following terms: "La vrai richesse d'un Royaume consiste dans

But if Public Wealth is truly and rightly defined, to consist of all that man desires as useful and delightful to him; as (from the explanation that has been already given of the nature of value, or of the circumstances that entitle any thing to the character which qualifies it for forming a portion of individual riches) we know, that, by adding the circumstance of scarcity to the qualities which make any commodity a component part of public wealth, we should give it value, and thus qualify it to form a portion of individual riches, it follows, that individual riches may be defined, -to consist of all that man desires as useful or delightful to him; which exists in a degree of scarcity.

With regard to the degree in which any commodity is to be classed as forming a portion of individual riches, it has already been explained and made evident, that the value of every thing depends upon the proportion betwixt the demand for it, and the

[&]quot;l'abondance des denrees." "The true wealth of a nation

[&]quot; consists in the abundance of its commodities."

quantity of it. But distinctly to understand the nature of individual riches, and the changes and variations of which they are susceptible, it will be necessary to examine into the alterations of value which the variation of that proportion, in any one commodity, may create in the general mass of individual riches.

The value of every commodity, it has been observed, may be altered:

- 1. By a diminution in its quantity;
- 2. By an increase in its quantity;
- 3. By an increase of demand;
- 4. By a diminution of demand.

And, to explain this subject thoroughly, each of these cases must be considered in its order, as well as the effects which they are likely to produce, not only on the commodity itself in relation to which they occur, but subsequently with a view to the effects which they indirectly produce upon the value of all other commodities, which form portions of individual riches.

1. Of the Effects of the Diminution of the Quantity of any Commodity on the Value of that Commodity.

On first consideration, it naturally occurs, that if the members of a society had devoted a portion of their respective riches for the acquisition of any given commodity, and a sudden scarcity had occasioned the existence of only half of the usual quantity of that commodity, the same portion of other goods, remaining applicable to the acquisition of the half which had antecedently been employed in acquiring the whole, the value of any quantity of it would be doubled.

For example: if one thousand pound weight formed the ordinary consumption of sugar in any society, and L. 50 represented the value of those commodities which the different members of the society allotted to give in exchange for sugar, sugar would then be at one shilling a pound; because one pound is a thousandth part of one thousand

pound, and one shilling a thousandth part of L. 50.

But if the supply of sugar was diminished to five hundred pound weight, one pound of sugar would then form the five hundredth part of the whole supply; and therefore it would be natural to conclude, that it would be worth two shillings a pound, as that sum is the five hundredth part of L. 50.

This reasoning, however, would be found altogether fallacious; for the alteration of value, which the diminution of the quantity of any commodity creates, depends upon a principle totally different.

One thousand pound weight of sugar was the quantity the society desired, when sugar was at the price of one shilling a pound, and the quantity they were accustomed to enjoy. To convey an idea of the real effect of diminishing at once the supply of sugar to five hundred pound weight, let us suppose that this society consisted of one hundred families, each of whom had the habit, at the time the supply amounted to one thousand pound weight, of consuming ten pound weight of sugar; for the acquisition and payment of which, each family, in the distribution of the order of their expences, used to sacrifice of the commodities they possessed the value of ten shillings, making of course the total value of commodities sacrificed to the acquisition of sugar by the hundred families amount to L. 50.

Each of these families being in the habit, according to this hypothesis, of consuming ten pounds weight of sugar; it must be a wish natural and common to them all, to continue enjoying, as nearly as possible, the same quantity of that commodity to which they were habituated. As the tastes of men are, however, various, some must be willing to sacrifice much more of their other enjoyments than others, though all of them will probably be willing to deprive themselves of some part of them for this purpose; it being highly improbable that sugar, or any other article whose quantity is suddenly diminished, should happen to be the one, among all the numerous objects of their desire, the consumption of which any of these families will most incline to relinquish or abridge.

Thus, the desire for sugar, which either taste or habit may have created, may, in some of these families, make them willing to deprive themselves of a portion of their other enjoyments equal to the value of twenty shillings, rather than abridge their consumption of sugar. The desire of others for that article may be so great, that, rather than forego consuming, as nearly as possible, the quantity to which they were habituated, they would sacrifice thirty shillings worth of their other enjoyments. And, as there is no answering for the effects of taste and habit, there might exist in the society men willing to sacrifice forty shillings worth of their other enjoyments, for the purpose of retaining, as nearly as may be, the quantity of sugar to which they were accustomed.

The competition that would be thus created *might*, it is evident, raise the price of sugar, in a degree far beyond what we

should be apt, at first sight, to expect from the diminution in its quantity. Indeed, it must have this effect, were it not that some of the consumers of sugar, preferring the enjoyment of the other things to which they were habituated, might be, on this account, willing to retrench in that article, or perhaps to renounce the use of it: altogether. On this last supposition, the five hundred pound weight of sugar, which, in consequence of the supposed diminution in the quantity, would form the whole supply of the market, would ultimately be acquired by the remaining consumers of sugar, in shares proportioned to the sacrifices which each was willing to make for the acquisition of it. But supposing the demand, created by the sacrifices which all were willing to make, to be such as to raise the price of every ten shillings worth of sugar thirty shillings more than formerly, then one hundred times thirty shillings, making L. 150, in addition to the former L. 50, in all L. 200, would represent the value of commodities

sacrificed for the acquisition of sugar; and sugar would of course be at eight shillings the pound; one pound of sugar being the five hundredth part of five hundred pounds weight, and eight shillings being the five hundredth part of L. 200.

This hypothetical statement of the increase in the value of sugar, which the abstracting of one-half of the supply might occasion, without pretending to give any accurate notion of the precise extent to which the value of the commodity would be raised, will lead the imagination to form, with greater facility, a just idea of the manner in which the diminution of the quantity of a commodity may affect the value of it.

It is obvious, that the desire of mankind to continue their usual enjoyments, must, with certainty, raise the price of every commodity of which the quantity is diminished: this rise of value must undoubtedly, in some instances, check the demand for it; and that again tends to counteract the effects the diminution of the quantity of the commo-

dity would otherwise have in raising its value. The rise of value, therefore, of any one commodity, in consequence of the diminution of its quantity, must be regulated by the perseverance of the consumers in their desire to enjoy the same quantity; which must universally depend on the nature of the commodity in which the scarcity exists; as the obstinacy in attempting to acquire the same quantity of it must be proportioned to the degree of inclination which either necessity, habit, or taste, has created for it. Thus, though we have known grain, meat, and other articles of first necessity, in certain situations, and under certain circumstances, rise in value from one to fifty, * articles of taste or luxury have hardly, in any instance, ever been found to rise to double or triple their usual value.

The diminution of quantity, therefore, must raise the price of different commodi-

^{*} See the account of the prices of grain, &c. in the siege of Paris, 1590. Rapport entre l'Argent et les Denrées, p. 44, 45.

ties in different degrees, having always a more powerful effect in proportion to the degree in which the commodity itself appears necessary.

2. Of the Effects of the Increase of the Quantity of any Commodity on the Value of that Commodity.

In considering the effects of the diminution of the quantity of any commodity on its total value, it was remarked, that it naturally occurred, that if the members of any society had devoted a portion of their respective riches for the acquisition of that commodity, and a sudden scarcity had occasioned the existence of only half its usual quantity, the same proportion of other goods remaining applicable to the acquisition of the half which had antecedently been employed in acquiring the whole, the value of any given quantity of it would be doubled.

In like manner, in considering the effects of the increase of any commodi-

ty on the value of the commodity, we are also led, at first sight, to conclude, that if the quantity of any commodity should be suddenly doubled, the same portion of other goods remaining applicable to the acquisition of it, which had been employed before the augmentation in acquiring what now constitutes one-half of the commodity, the value of any given portion of it would be reduced one-half.

This reasoning, however, would be found just as fallacious, as that which was stated to occur on first considering the diminution of the quantity of any commodity; for the effects of the increase of the quantity of a commodity, upon the value of that commodity, depend also on a very different principle.

To convey an idea of the real effects of increasing the quantity of any commodity on the value of that commodity, let us again suppose a society, in which one thousand pound weight of sugar formed the ordinary consumption; and L. 50 represented the value of those commodities which

the growers of sugar acquired in exchange for their sugar, and which, of course, they were habituated to enjoy.

If, all at once, there came into the market two thousand pound weight, the value of sugar by this alteration in the proportion betwixt the quantity and the demand for it, would be suddenly reduced. The consumers of sugar would find, that they could get the quantity of that article they were habituated to enjoy, by sacrificing a much smaller quantity of their property to the acquisition of it. The growers of sugar, on the contrary, would discover, that they could by no means procure, in exchange for sugar, the same quantity of the objects of their desire; each of them, however, naturally endeavouring to obtain the same things to which he was formerly habituated, would be induced, for that purpose, to press his sugars on the consumers; and though at first, in some instances, the market might be so managed, by not producing too much at a time, that the reduction of price might be comparatively trifling, yet

the avidity of each of the growers of sugar, to obtain, in exchange for his sugar, as nearly as possible, the same quantity of those commodities which he was formerly accustomed to enjoy, would ultimately force the market, in such a manner as to render the sugar, thus doubled in quantity, incapable of acquiring any thing like the same quantity of goods which the growers of sugar formerly obtained in exchange for the commodity they reared.

It is true, that this reduction of price would create new consumers of sugar, which would, in a degree, counteract the effects of the augmentation of the quantity of sugar upon the value of that commodity, in the same manner as the rise of value, in consequence of the diminution of the quantity of a commodity, has been described to be checked, by some of the consumers renouncing the use of it; and the effect of increasing the quantity, in diminishing the value of any commodity, must undoubtedly be more or less in proportion

as the diminution of its value creates sources of demand.

The alteration, therefore, in the value of commodities, in consequence of the increase of the quantity of them, must depend, in a great degree, on the nature of the commodities themselves.

With respect to the necessaries of life, if a peculiarly fertile season should create an extraordinary abundance of them, as every person must generally enjoy nearly as much of those as he can consume, without which he could not exist; there is hardly a possibility of conceiving any sudden source of extended demand, capable of counteracting the effects of the abundance. But, on the value of those ornaments and luxuries, which scarcity has rendered precious, a proportionable increase of quantity could never effect the same variations: as the reduction of the price of an article (which, after all, would be so scarce) must increase the number of candidates for it, and thus create new sources of demand, sufficient to absorb the additional quantity, long before its value was very greatly depressed.

The increase of quantity, therefore, must sink the price of different commodities in different degrees, having always a more powerful effect in proportion to the degree in which the commodity has been considered necessary, and, as such, is an article of general consumption.

Thus, though it appears probable, as conjectured by Sir Richard Steele, that an increase of one-tenth more than is usually consumed of grain might diminish the value of the grain in the country one-half; yet the existence of a tenth more of diamonds, or a tenth more of gold, never could have such an effect.

3. Of the F.ffects of an Increase of Demand for any Commodity, on the Value of that Commodity.

As the value of every commodity depends alone on the proportion betwixt the demand for it, and the quantity of it, and as similar alterations in the proportion betwixt the demand and the quantity of any commodity, may be produced, either by variations in the quantity of it, or by variations in the demand for it; it follows, that similar effects must ensue, whether the variation is produced by an alteration in the quantity of the commodity, or by an alteration in the demand for it; provided always, that, in consequence of such alterations, the same proportion is established betwixt the demand for, and the quantity of, the commodity.

For example, let us suppose any two societies possessed of the same quantities of all sorts of commodities, and each enjoying a supply of a thousand pound weight of sugar, for which there existed a steady and settled demand; if, in the one country, the supply of the market should be diminished to five hundred pound weight, it is obvious, that the demand would be double the quantity for which there existed a supply; and if, in the other country,

tne supply continuing at one thousand pounds weight, there should suddenly arise a demand for two thousand pounds weight, it is equally obvious, that, in this case, the demand would be double the quantity for which there existed a supply. The new proportion, therefore, established betwixt the demand and the quantity, would, in either case, be exactly the same; and, of course, the value of any given quantity of sugar must, in either case, undergo exactly the same alteration.

If, therefore, we could suppose that there was any accuracy in conjecturing, that the diminution of the supply of sugar from one thousand to five hundred pound weight, would raise the value of sugar from one shilling to eight shillings a pound, it follows, that sugar, if the demand was by any means doubled, would also rise to eight shillings a pound; the whole thousand pound weight would then be worth L.400; and, of course, L. 350 worth of goods antecedently allotted for the purchase of other commodities, must be added, in conse-

quence of the increased demand, to the L. 50 worth, previously applicable to the acquisition of the one thousand pounds weight of sugar, when the sugar was at one shilling a pound.

In stating the effects of the diminution of one-half of the supply of sugar, it was observed, that the augmentation of the price might induce some of the consumers of sugar, who preferred the full enjoyment of other things, to which they were habituated, to renounce, in whole or in part, the use of sugar; and that the rise in its value, by the reduction in its quantity, might, in some degree, receive a check from this circumstance. In like manner, when the value of sugar rises in any great degree by a sudden extension of demand, such as we have here supposed, it is obvious that a similar check to the rise of its value, will, to a certain extent, be given, by some of those who were habituated to enjoy sugar at one shilling a pound, not choosing to sacrifice to the acquisition of sugar so much of the other commodities they were accustomed to enjoy, as becomes necessary to obtain sugar in consequence of the rise in its value.

The degree, however, in which this check will operate, as in the former case, must depend upon the nature of the commodity for which the extension of demand takes place. It is obvious, that no rise in value can induce men to renounce the acquisition of the necessaries of life, provided any sacrifices they can make will procure them; and this check will therefore operate, just in proportion to the degree of inclination which either necessity, habit, or taste, had created for the commodity; that is, it will be more inconsiderable, in proportion as the inclination to obtain the usual quantity of it is less urgent.

4. Of the Effects of Diminution of Demand for any Commodity, on the Value of that Commodity.

From what has been said on the three cases of the variation in the value of com-

modities, which have been already considered, it must be at first sight clear, that as this fourth, and only remaining circumstance, which can cause variation of value in any commodity, again supposes an alteration in the proportion betwixt the demand for, and the quantity of, the commodity in which it takes place; it must also produce effects similar to those that have already been described.

If, for example, we suppose a society, whose usual supply of sugar amounted to one thousand pound weight, for which there existed a settled and steady demand; should an alteration in the state of this society all at once induce them to be satisfied with five hundred pounds weight, the demand would of course be reduced one-half. Sugar must, therefore, become cheaper; and the natural desire in the growers of sugar to acquire, as nearly as possible, in exchange for their sugars, the quantity of other commodities that they were habituated to enjoy, would lead them to force the market in such a manner, as to make the

one thousand pounds weight of sugar sell for a sum much smaller than the L. 50, which formed the value of the whole thousand pound weight, when sugar was at one shilling a pound.

The reduction of the value of sugar might, as in the case of diminution of value by augmentation of quantity, create new sources of demand; but as, in that case, it was observed, that the extent of the alteration of value depended upon the nature of the commodity, the extension of the quantity having always a more powerful effect in reducing the value, in proportion to the degree in which the commodity has been considered necessary; so, in the present case, the alteration, which the reduction of demand operates, must also depend upon the nature of the commodity, and will be regulated on the same principle.

Before concluding this subject, it is necessary to remark, that though variations in value, whether produced by alteration of the quantity of commodities, or of the demand for them, provided they occasion similar alterations in the proportion, must produce the same effects upon the value of any commodity, or in the degree in which it forms a portion of individual riches; yet they indicate very different effects on the state of public wealth: for it has already been observed, that, by the diminution of the quantity of a commodity, its value will be increased, though public opulence is by that means diminished; and that an augmentation of the quantity of a commodity must diminish its value, though by this means the opulence of the society is increased. When, however, an increase of value is produced, by an augmentation of demand, or the value of any commodity is reduced by a diminution of demand, the public wealth of the community is, at the moment of the alteration in the demand, in every respect unchanged, notwithstanding the variation which takes place in individual riches.

Having now explained the manner in which the value of commodities, or the

degree in which they form a portion of individual riches, is affected; first, By a diminution of the quantity of a commodity; secondly, By an increase in its quantity; thirdly, By an increase in the demand for it; and, fourthly, By a diminution of demand for it; I proceed to consider, what effect the alteration in the order of the expenditure (which a diminution or augmentation in the value of any one commodity must produce) will, in each of these events, occasion on the sum-total of individual riches.

1. Of the Effects of the Alteration in the Order of Expenditure, occasioned by a Diminution in the Quantity of any Commodity.

Ir, in any society, the quantity of sugar, as we have already supposed, be diminished from one thousand pounds weight to five hundred; should the conjecture that has been made, to wit, that this might increase

the value of sugar from L. 50 to L. 200, be accurate; it would be, at first sight, natural to suppose, that the additional L. 150 worth of commodities, now applied to the purchase of sugar, which used to be employed in the acquisition of other articles. would reduce the value of those articles just as much as the value of sugar was, by this means, increased; and that, therefore. the sum-total of individual riches would remain the same. But a little attention must convince any one, after perusing the remarks which have been made on the consequence of alteration in demand, as well as on the effects of alteration in quantity, that this cannot be the case.

As the tastes of men, as well as their attachments to different habits, are various; if by any means they were induced to sacrifice L. 150 worth of their other enjoyments to the acquisition of sugar, it is probable that they would obtain this extra sum by a diminution of consumption, more or less, of every commodity which forms a portion of individual riches.

With a view, however, to explain the effects of this derangement of expenditure, let us suppose that the tastes of men should lead them to procure the L. 150, the advanced sum we have supposed to be necessary to obtain the five hundred pounds weight of sugar, by transferring to the acquisition of sugar a part of the commodities which they formerly allotted to obtain the three articles of butchers-meat, wine, and mustard; and let us further suppose, that the consumers of sugar actually withdrew L. 50 from the usual expenditure in each of these articles.

If L. 50 worth of commodities usually allotted to the purchase of butchers-meat, was withdrawn from the acquisition of that article, the demand for butchers-meat must be diminished, and the established proportions betwixt the demand for it and the quantity of it, altered in such a manner as to reduce its value. But we have already shewn, that a diminution of demand for any commodity reduces the price of the whole commodity, much

more than the sum which represents the amount of the demand that is abstracted from it; and it is evident, that the natural avidity in the proprietors and retailers of butchers-meat, to acquire and consume the usual quantities of commodities, which they were accustomed to receive in exchange for this article, would (as has been remarked in the case of the growers of sugar) induce them to force the market to such a degree, as to render L. 50 a very inadequate representation of the total diminution of the value of all the butchersmeat in the market, which the abstracting of L. 50 worth of demand would create; for, in reality, the value of the butchersmeat would be thus diminished in a much larger sum.

It is obvious, too, that similar effects will be produced in the diminution of the value of mustard and of wine, by the supposed abstraction of L. 50 worth of commodities, which used to be appropriated to the purchase of those articles.

The eagerness of the growers and posses-

sors of each of these articles, to attain as nearly as possible the same quantity of commodities in exchange for it, must, as in every case of diminution of demand, reduce the value of the article much more than the amount of the value of the demand abstracted. The effect, however, of abstracting L. 50 worth of demand from butchersmeat, from wine, and from mustard, must be very various in degree; because, abstracting a demand to the extent of L. 50, must produce a very different effect on the proportion betwixt the demand for, and the quantity of each of these commodities.

It is plain that, whilst it might diminish the demand for mustard one-half, it might perhaps abstract only a fifth of the demand for wine; whereas, in the case of the butchers-meat, it might probably annihilate only a twentieth or a thirtieth of the usual demand: and as this would have very different effects in altering the proportion betwixt the quantity and the demand of each of these articles, so it must alter, in a very different ratio, the value of a given quantity of each; which has already been exemplified in the calculation quoted from Davenant concerning the price of corn. *

2. Of the Effects of the Alteration in the Order of Expenditure, occasioned by an Increase of Demand for any Commodity.

As we already know, that an augmentation of demand, if it establishes similar proportions betwixt the demand for, and the value of, any commodity, must produce similar effects upon the value of any portion of it; let us suppose, instead of the supply of sugar being reduced from one thousand pound weight to five hundred, that the supply remaining the same, (to wit, one thousand pound weight,) there should arise a sudden demand for two thousand pound weight. On this supposition, if we were right in conjecturing, that sugar, by the diminution of the one-half of its quantity,

would rise to eight shillings a pound, sugar must then also rise to the same price, in consequence of the increased demand; and the value of the whole one thousand pound weight of sugar would of course be L. 400.

In this case, instead of L. 150 worth of goods being abstracted from the acquisition of other commodities, it is evident the consumers of sugar would be under the necessity of abstracting L. 350 worth of articles, which they antecedently devoted to the acquisition of other enjoyments; and if we suppose their tastes, in like manner, to lead them to procure this sum, by curtailing their consumption of butchers-meat, wine, and mustard, therewould be, all at once, a deficiency in the ordinary demand for each of these articles to the extent of the third part of this L. 350; that is, to the extent of L. 116, 13s. 4d., which would produce a much more formidable diminution in the value of butchers-meat, wine, and mustard, than was occasioned by abstracting L. 50 worth of demand from each; and of course impoverish, in a much greater degree, the proprietors of those articles.

It is extremely important here to observe, that though, by this means, the mass of individual riches would be much diminished, yet this last hypothesis proceeds upon the idea, that sugar, butchers-meat, wine, and mustard, should all of them exist in the same quantities; and, indeed, that the state of no one commodity whatever should be altered: that is, that the wealth of the nation should remain exactly the same; the diminution of individual riches, being, in this instance, alone created in consequence of a supposed change of taste, which produces a sudden alteration in the demand for one commodity.

Further, though the consequences of this sudden demand for an increased quantity of sugar, in reducing the value of butchersmeat, wine, and mustard, of which we have attempted to give a view, must have a considerable effect on the diminution of the mass of individual riches, by its operation on the value of these three articles; its ef-

fects will not terminate here: for the proprietors of butchers-meat, wine, and mustard, having, from the reduction of the value of their property, less to bestow on their different enjoyments, the demand for other commodities must be by this means diminished, and that, in every case, to a greater degree than the amount of the sum which represents the demand abstracted; for it is important always to recollect, that every abstraction of demand must produce a diminution in the sum-total of the value of the commodity from which it is abstracted, greater than is expressed by the sum abstracted.

It is on this principle, that a great and sudden alteration of demand for any commodity or class of commodities, has been always found to produce a fatal diminution of individual riches, though the wealth of the nation remains unaltered and unchanged; and this is a proposition the truth of which does not depend upon any theory. The merchants of this country have severely felt it, both at the commencement of the

last, and of the present war. * It is the knowledge mercantile men derive from experience of the calamitous effects of a sudden alteration of demand, that leads them often to declare, (what to those who have not studied the subject appears ridiculous,) that they prefer even the calamities of continued warfare, with all its attendants, such as advanced wages, increased freights, and insurances, to a fluctuation betwixt war and peace; and the theory here advanced explains the grounds of the assertion.

Indeed, nothing can more forcibly illustrate the truth of this doctrine, than the events which happened at the commencement of the last war. The sudden demand for all those articles which warfare makes

^{*} The following statement of bankruptcies, taken from the London Gazette, seems to shew, that the effect of this derangement of expenditure, is felt, more or less, at the commencement of every war,

necessary, abstracting a large portion of the demand from the commodities prepared and preparing for the market, on the supposition it was to remain in the usual state, diminished thereby the value of the commodities on hand to such a degree, that the merchants and manufacturers were incapable of making good their engagements.

In this situation, Government aided the mercantile interest with loans of money, in two hundred and thirty-eight different cases, amounting in all nearly to two million two hundred thousand pounds. * This empowered the merchants to retain their goods for a time; and as the quantity imported and manufactured was soon curtailed, in consequence of the effects of the war, the proportion came within a short time to be restored betwixt the demand and the quantity, in such a manner, that the commodities resuming their former value, those who received assistance were

^{*} The exact sum was L. 2,202,200.

enabled to repay Government without any loss; which was to be expected, because, though the value of the commodities was diminished in consequence of the sudden alteration of demand, they remained in substance: the wealth of the nation was in fact nowise affected by it; and the goods in hand were sure to resume their value, whenever, by the diminution of supply, the proportion came to be restored betwixt the quantity of them and the demand for them. *

^{*} It is perhaps unfortunate, that the cause of this evil, as well as the mode in which the relief operated, never was sufficiently explained; otherwise it would have been impossible, that similar relief should have been refused at the commencement of the present war; because, as the evil originates with measures which Ministers think it necessary to take for the public safety, it is not alone views of expedience which ought to induce government to aid the mercantile interest, for the merchants must appear to have in equity a right to such assistance.

3. Of the Effects of the Alteration in the Order of Expenditure, occasioned by an Increase in the Quantity of any Commodity.

The variation likely to be effected in the value of a commodity, by an increase of its quantity, has been already traced out and exemplified, by supposing the usual supply of sugar in any society to be at once increased from one to two thousand pound weight. The reduction of the value of that article, which must naturally ensue from the manner the growers of sugar will be induced to press it on the market, in consequence of their avidity to obtain the usual quantity of the objects of their desire, has been pointed out; and it appears obvious, that the consequence of thus reducing the sum-total of commodities applicable to the acquisition of sugar, must be, that a part of what was formerly applied to the purchase of this article, becoming unappropriated, will remain in the hands of the consumers of sugar, to be used

for the acquisition of such other commodities as are most suitable to their taste.

For these articles, therefore, whatever they may be, there must of course be an additional demand; and the value of each of them must rise just in proportion, as more or less of the goods formerly applied to the acquisition of sugar, is now appropriated to acquire that particular article.

Though reason teaches us, that this must be the case, it is not alone to be inferred from theory and speculation. In practice, the effect of a great increase of the quantity of a commodity, in raising the price of other commodities, has been long a matter of notoriety. It has been long a common and constant remark of those who habitually attend to the value of public securities, that the price of stock, in a fertile season, will stand perceptibly higher, by two or three per cent., than in a year of scarcity.

Grain is, indeed, the article most necessary to man; and as mankind must generally enjoy nearly a sufficiency of that on which their existence depends, a sudden in-

crease in the quantity of such an article, must, as has been shewn, produce a greater diminution in its value, than a proportionable increase of quantity would produce in the value of articles of taste; because there is hardly a possibility of conceiving a sudden source of extended demand, and of means of satisfying that demand, for a thing of which every man must have nearly enough; whereas, the reduction of value produced in articles of taste, by a similar increase of quantity, (which, after this increase, will still remain comparatively scarce,) must create new sources of demand for them, long before their value can be materially reduced.

The effect, therefore, of an increase in the quantity of grain, in raising the price of other commodities, must be more easily perceived; but there is no commodity whatever, of which the quantity can be increased so as to diminish its value, without occasioning an augmentation of the value of some other article. 4. Of the Effects of the Alterations in the Order of Expenditure, occasioned by a Diminution of Demand for any Commodity.

As there never exists a desire, and consequently a demand, for any commodity, but from the circumstance of its power to satisfy either the appetite or taste of mankind; so there never exists a diminution in the demand for any commodity, buteither in consequence of a rise in the value of some other commodity, the full enjoyment of which man prefers, making it necessary to abstract some part of the commodities usually appropriated to the acquisition of it, that by their means he may obtain, as nearly as possible, his usual quantity of the commodity he prefers;—or in consequence of something being discovered better adapted to satisfy the same desires.

It appears, therefore, that the effects in the alteration of the order of expenditure occasioned by a *diminution* in the demand for any commodity, have been already considered, and treated of under the head of the effects in the alteration of the order of expenditure occasioned by the *increuse* in the demand for any commodity.

This part of the subject was there illustrated, by pointing out the consequences of diminution of demand for the articles of butchers-meat, wine, and mustard: it is, therefore, here only necessary to repeat, that the effects in the diminution of demand for any article, never terminate by diminishing the value of the commodity in relation to which they take place; because, as the proprietor of that commodity must, by the diminution of its value, have less to bestow on the acquisition of the various objects of desire he was accustomed to enjoy, so a diminution in demand must also take place with regard to them; and the same consequences must, indirectly through them, ensue with relation to other commodities, which the possessor of this last class of goods was habituated to enjoy.

Though it seems established by the fore-

going reasoning, that an augmentation in the riches of individuals may be attended with a diminution of wealth, that the riches of individuals may be diminished by a society's becoming more wealthy, and that, while the wealth of the community remains unaltered in every particular, there may be, from the circumstance of variation in demand, a diminution or augmentation in the sum-total of individual riches; (though, indeed, it can seldom happen, that an increase of the one should produce a similar increase in the other;) yet there is a possibility that the mass of individual riches may be so augmented under such circumstances, that the increase will indicate a proportional augmentation of the wealth of the community.

Let us suppose, for instance, that the supply of sugar should suddenly increase in any society; for example, from one thousand to fifteen hundred pound weight; and that the demand should increase in the same proportion: let us further suppose, that every person who grew or fabricated any commodity with which sugar was

purchased, should have, in like manner, produced an extra quantity of various articles, for which the growers of sugar should have also a proportionably increased demand. Then, as the hypothesis implies, that, in every instance, there would be maintained the same proportion which existed antecedent to the increase of production, both betwixt the quantity and demand for each of the commodities usually sacrificed to the acquisition of sugar, and betwixt the demand for, and quantity of, sugar itself; the increase of value must be, in such a case, exactly proportioned to the increase of quantity; that is, the mass of individual riches, and the wealth of the community, will increase in the same proportion.

It follows then, that, when we come to examine, whether the wealth of the society will really be augmented by any proposed regulations, (as men are only interested in soliciting legislative arrangements in consequence of their effect in increasing individual riches,) we must consider:—

- 1. Whether that augmentation of individual riches is produced solely by the diminution of the quantity of any commodity.
- 2. Whether it is produced solely by an augmentation of demand for any commodity.

For, in the first of these cases, there must of necessity be a diminution of public wealth;—in the second, public wealth will neither be increased nor diminished; and, in both cases, though there will be an immediate increase of individual riches, as far as the value of one commodity contributes; yet, in consequence of the derangement of expenditure, there will be a much greater diminution in the value of other commodities, and, of course, a great falling off in the general mass of individual riches.

If, however, we find, that the means proposed tend to increase proportionably both thequantity of, and the demand for, any commodity, and at the same time to create funds for the acquisition of this additional quantity, without diminishing the demand for any other commodity, it may

be then considered as a proposition which will undoubtedly augment, in the same proportion, both the riches of individuals, and the wealth of the society.

For example: if the supply of sugar is increased from one thousand to fifteen hundred pound weight, and there should, that year, be produced by the consumers of sugar an extra quantity of grain, (for which the growers of sugar should have a demand,) just sufficient to pay for the increased quantity of sugar; then, as the proportion betwixt the demand for, and the quantity of, sugar would be preserved, notwithstanding the increased supply; and as the proportion would be in like manner preserved in relation to grain, and nowise altered in any other commodity; the increase of individual riches would be in direct proportion to the increase of the quantity of grain and sugar: that is, public wealth and individual riches would increase in similar proportions.

But if it should appear, that the means proposed tend only to create a rise in the

demand and the quantity of one commodity,—of sugar for example; and that this additional quantity of sugar is to be paid for, by abstracting a portion of commodities from the acquisition of other objects of desire; then the wealth of the community may indeed be increased in the same proportion with individual riches in the single article of sugar: that is, the quantity of sugar and the value of it will increase in the same proportion. But the diminution of demand for other commodities, from the purchase of which there was abstracted that which is now applied to the acquisition of the additional quantity of sugar, must reduce the price of them so as to diminish the mass of individual riches; because, as has been already explained, the abstraction of demand to a given amount always sinks the value of the commodity from whence the demand is abstracted, to a much greater amount than the value abstracted.

For instance: if the growers of grain, whom we suppose to have had a demand

for, and to have purchased the increased quantity of, sugar, instead of having an increased quantity of grain to pay for it, had paid for it by abstracting from the acquisition of butchers-meat, wine, and mustard, a quantity of grain which they formerly sacrificed to the purchase of these commodities; then the reduction of the price of these articles, in consequence of the diminution of demand for them, must (notwithstanding the wealth of the public, and the mass of riches, are proportionably increased in as far as sugar is concerned) occasion a diminution in the mass of individual riches; because the diminution upon those articles must be much greater than the increase in the value of sugar.

The conclusion is therefore inevitable, that there exists only one case, and that a very improbable one,—(to wit, when the quantity and the demand for any commodity are proportionally increased, and funds at the same time are created for the acquisition of the increased quantity, as well as the satisfaction of the increased demand,)—

in which an increase in the mass of individual riches produces a similar effecton the wealth of the community.

It is further necessary to remark, that, when variations in value, or in the mass of individual riches, are created by alterations in the quantity of any commodity, the opposite effect in all cases immediately takes place in public wealth. A diminution of the value of a commodity, in consequence of an alteration of its quantity, is an invariable symptom of an immediate increase of its quantity; and of course of an increase of public wealth: an augmentation of the value of a commodity, in consequence of an alteration of its quantity, is an invariable symptom of an immediate diminution of its quantity, and consequently of a diminution of public wealth.

But if there is a diminution in the value of a commodity, in consequence of a variation in the demand for it, this is no symptom of an immediate alteration in the quantity of the commodity; but it is a sure presage of future diminution of its quantity, and of course a diminution of public wealth; and if there is an augmentation in the value of a commodity, in consequence of an alteration in the demand for it, this, in like manner, is no symptom of an alteration in the quantity of a commodity; though it is always followed by a reduction of its quantity, and of course by a reduction of public wealth.

A confirmation of the opinion, that private riches and public wealth can hardly ever increase in similar proportions, is not, therefore, the only valuable information we derive from contemplating the variations which changes of quantity and of demand create, not only in the value of the commodities in which they take place, but also indirectly in that of all other commodities; and of course in the value of the mass of what is annually produced by nature and art.

For, as exchangeable value (the possession of which constitutes any commodity a portion of individual riches) is, when accurately considered, merely the practical

means of expressing the degree of desire for any particular article of wealth, it is also most material to observe the forcible manner in which, from this analysis of the causes of variation in the value of commodities, it appears, that demand must at all times regulate both the quantity and quality of what is produced.

Thus, when variations in value are created by an increase of demand for any commodity, the industry of the community is not alone directed to increase the production of that article, by the extraordinary encouragement derived from its augmented value; for a part of the industry is at the same time called off from the formation and production of other articles, by the discouragement which a diminution in their value creates; as was exemplified in the effects of an increased demand for sugar in raising the price of that article, and in depressing the value of wine, butchers-meat, and mustard, and consequently that of various other articles.

In like manner, when variation in value

is occasioned by a diminution of demand, it discourages the production of the commodity for which the demand is diminished, not only by the great reduction of its value; for, at the same time, new and highly advantageous channels of industry are pointed out for those who were employed in producing it, by the extension of demand for, and consequent rise in, the value of other commodities, which it has been made apparent must take place.

It follows also from what has been stated, that, when variation of value is occasioned by alterations in the quantity of commodities, demand must act with the same compounded energy; for, when the quantity of a commodity is increased, the production of it is not alone discouraged by the great diminution of its value, but the industry of the community is at the same time directed towards the formation of articles, to the acquisition of which those goods are applied, which have become unappropriated in consequence of the cheapness of the abundant commodity, whose

value is now increased by this additional demand.

In like manner, when the quantity of any commodity is diminished, demand operates in restoring the usual supply, not only from the encouragement it gives to those who are concerned in producing that article, by the great rise in its value; but, with augmented energy, from the circumstance, that the necessary fall in the price of other commodities calls off a portion of industry from the formation of them, whilst it points it to the production of the article whose quantity is reduced.

CHAP, III.

OF THE SOURCES OF WEALTH.

Though it may appear extraordinary, that the sources of wealth, which have been the object of much speculation, should not have been long ago accurately investigated and defined; it is nevertheless certain, that there is no subject on which there has existed, and does exist, more marked variety of opinion.

Land, labour, and capital, are indeed the only sources to which the origin of any part of our wealth has ever been ascribed. But while some have eagerly contended, that land is the sole source of opulence, and that whatever is acquired by labour or capital is derived from the landholder, others have discovered equal anxiety to attribute the origin and increase of our wealth to commerce and manufactures; that is, to the operation of labour and capital.

That system which represents the produce of land as the sole source of the revenue, and the wealth of a nation, * has long had its disciples in this country, who have considered the earth as the fountain of all the riches and abundance of the world, partly proceeding from its mines and its fisheries; principally from what is nourished on its surface. †

"What we call commodities," (says an ingenious author of the 17th century, ‡)

^{*} This opinion is of very ancient date. It is said to have been a saying of Artaxerxes, King of Persia, That "the au"thority of the Prince must be defended by a military force;
"which force can only be maintained by taxes; and all taxes
"must, at last, fall upon agriculture." Gibbon's History, Vol.
I. p. 256, 4to edit.

[†] See the Treasure of Traffic, by Lewis Roberts, 1641. Vanderlint's Essay to make Money plenty. Also, Locke on lowering the Interest, and raising the Value of Money.

[‡] Several assertions proved, in order to create another species of Money than Gold, 1696.

"is nothing but land severed from the soil.

"Man deals in nothing but earth. The

"merchants are the factors of the world, to

"exchange one part of the earth for ano
"ther. The King himself is fed by the

"labour of the ox; and the clothing of the

"army, and victualling of the navy, must all

"be paid for to the owner of the soil as the

"ultimate receiver. All things in the world

"are originally the produce of the ground,

"and there must all things be raised."

The system, on the other hand, which gives to commerce the pre-eminence as a source of wealth, was for years the favourite, if not the established doctrine, in this country. * Its followers held, that those nations who have no mines of gold and silver, have no means to get them but by foreign trade; that in proportion to the quantity of those metals which a nation can thus obtain, the prices of its commodities, the numbers of the people, and therewith the value of its land, rise and fall: that

^{*} See Appendix, No. II.

if the exports of a nation exceed the imports, foreigners must pay the balance in treasure, and that the nation must of course grow rich: that if, on the other hand, the imports exceed the exports, the balance must be paid to foreigners in treasure, and the nation grow poor.

This last opinion, though early opposed by men of eminent talents, has long formed the ground-work on which European legislation has proceeded,—if we may judge from the rules and regulations that it has been the object of the legislature of this country, as well as the laws of others, to establish.

Of late years, this opinion has been reprobated by the Economists in France, and by the Author of the Wealth of Nations in this country; and its fallacious, as well as dangerous, consequences have been exposed. But though we are indebted to Dr Smith, and to that sect of philosophers, for setting aside a system replete with error, we unfortunately derive neither from the one nor the other, a satisfactory solution of that

most important question in Political Economy, What are the sources of Wealth?

The prejudices of mankind, with reason, (as we shall have ample opportunity of shewing,) revolt at the opinions maintained, with so much perseverance and ingenuity, by the followers of Quesnay, which totally set aside labour and capital as sources of wealth; and which regard that part of the produce of the earth remaining after payment of the total expences of culture, as alone contributing to the wealth of a nation; and we derive from Dr Smith no assistance in forming our opinions on this important subject; for he seems to have had no fixed ideas in relation to it. Indeed, there is no opinion that has been any where maintained on the subject of the sources of national wealth, which does not appear to have been adopted in different parts of the Inquiry into the Wealth of Nations.

"1. The annual labour of every nation is" at one time stated to be "the fund which originally supplies it with all the

"necessaries and conveniences of life, which it annually consumes, and which consists always either in the immediate produce of that labour, or in what is purchased with that produce from other nations." *

- 2. Lands, mines and fisheries, elsewhere, are regarded as replacing "with a profit, "not only the capitals employed on them, "but all the other capitals employed in the "community." † That, however, which replaces all the capitals employed in the community, and is the source from whence they derive their profit, must be the sole source of wealth. Mankind are, therefore, here considered as deriving the whole of their wealth from land.
- 3. Again: plain reason is stated to dictate, that the real wealth of a country consists in the annual produce of its land and

^{*} Wealth of Nations, Vol. I. p. 1. 4to edit. This opinion is maintained by Mr Hume. See his Discourse of Commerce, p. 12. edit. 1752.

⁺ Wealth of Nations, Vol. I. p. 338. 4to edit.

labour; * and this opinion, which coincides with that of the Bishop of Cloyne, † and the learned author ‡ of the Essay on Money and Coins, is most generally adhered to by Dr Smith.

4. In another part of the work, however, we find it asserted, that "land and "capital stock are the two original sources of all revenue, both private and public: "capital stock pays the wages of productive labour, whether employed in agriculture, manufactures, or commerce." Land and capital are therefore here deemed the sole sources of wealth; and labour is considered as deriving from them its wages, without adding to the opulence of the community.

5. Lastly, we are taught to consider land,

^{*} Wealth of Nations, Vol. I. p. 414.

[†] Querist. Quer. 4. "Whether the four elements, and "man's labour therein, be not the true source of wealth."

^{‡ &}quot;Land and labour together are the sources of all wealth.

[&]quot;Without a competency of land, there would be no subsist-

[&]quot; ence, and but a very poor and uncomfortable one without

[&]quot;labour. So that wealth or riches consist either in a property in land, or in the products of land and labour."

[§] Wealth of Nations, Vol. II. p. 560. 4to edit.

labour, and capital, as being, all three, sources of wealth; for we are told, that "whoever derives his revenue from a fund that " is his own, must draw it either from his " labour, his stock, or his land. The reve-" nue derived from labour is called wages; "that from stock profit; and from land " rent;" * an opinion which seems to have been hinted at by Sir William Petty, † when he stated it as an impediment to the wealth of England, that taxes were not levied upon lands, stock, and labour, but chiefly upon land alone; though land and labour are generally considered by that ingenious writer as the sole sources of wealth. 1

In treating of Political Economy, the science which professes to display and to teach the means of increasing the wealth of a state, it would seem that the first and

^{*} Wealth of Nations, Vol. I. p. 63. 4to edit.

[†] Tracts, Edit. 1768, p. 268.

^{† &}quot;Labour is the father and active principle of wealth, as "lands are the mother." Treatise on Taxes and Contributions, 1667, 4to edit. p. 47.

most anxious object of inquiry ought to have been, What wealth is, and from what sources mankind derive it? for it appears impossible to discuss with precision the means of increasing any thing, without an accurate notion of its nature and of its origin. Yet, if we reject the doctrine of the Economists, it is in vain we look for a decided and precise opinion upon the origin of wealth, in any modern work on public economy; and it is impossible not to think, that the anxiety of the economists to overthrow that system, which regards commerce as the sole source of opulence, has led them, in rejecting labour and capital as original sources of wealth beyond the bounds that reason authorizes.

The liberal doctrines to which this theory led, by inculcating the impropriety of all legislative restraints, or interference in commercial transaction, must command approbation; but they are nowise inconsistent with the opinion we shall endeavour to establish, that land, labour, and capital are,

all three, original sources of wealth; that each has its distinct and separate share, (which it is most necessary should be defined and understood,) in the formation of those objects which are desirable to man, and which have been shown to constitute his wealth.

Though these three original sources of wealth, in the various states of existence in which history displays man, contribute to his wealth in very different proportions, yet, in every state of society in which he is known to exist, each, more or less, affords its share.

Consumption, most undoubtedly, must always precede reproduction; but, long before man cultivated the earth as a means of procuring his subsistence, he must have derived his wealth from all of these sources. To appropriate the fruit of a tree or an animal for food, he must have, in a certain degree, laboured; and it will be shown, that the first stick or stone he took into his hand to aid and assist him in procuring

those objects, by performing a portion of his labour, fulfilled the same duty in which every branch of the capital of a mercantile nation is now engaged.

1. Of Land, including Mines and Fisheries, as a Source of National Wealth.

In the earliest stages of society, men acquire that portion of wealth they derive from the surface of the earth, in the same manner as, in every stage of society, they attain that part of their wealth which proceeds from the ocean. Their exertions are not made to increase the quantity, but to appropriate and adapt for use the portions of those things nature has formed, for which their wants and their appetites give them a desire.

In this state of his existence, therefore, man derives a greater proportion of what forms his wealth from land, than in subsequent stages of society, when the aid of labour and capital are called in, not only to appropriate and render fit for use, but to meliorate the quality, and increase the quantity, of those commodities for which his desires create a demand.

This, however, is but of short continuance; for nature, whilst she has implanted in him the seeds of an unbounded variety of desires, has every where scattered, with so sparing a hand, the means of satisfying them, that the assistance of labour and capital is early called in to perform the most important duty allotted to them through any stage of society, that of increasing the quantity of those productions of nature which form the objects of our desire; and from that moment, the natural produce of the earth gives way to those productions, which the industry of man, by improvement in cultivation, procures in augmented quantity and superior quality.

In treating of the increase of wealth, therefore, we shall again be called upon to consider this subject. At present it is on-

ly necessary to observe, that, with the single exception of the economical system long prevalent in France, every thing useful to man, produced by land, whether spontaneously or extracted by art, has been deemed, under all systems of political economy, to add to the wealth of a country.

It was, indeed, the principal tenet of the economists, that the earth is the sole source of riches, which are multiplied by agriculture; * but, by a strange mode of reasoning, they exclude that part of the produce of the earth which is reserved for seed, and for furnishing the nourishment of the cultivator, from forming any portion of national wealth. † This part of the produce

^{*&}quot; Que le Souverain et la Nation ne perdent jamais de vue, que la terre est l'unique source des richesses, et que c'est l'agriculture que les multiplie."—" Let the Sovereign and the Nation constantly keep in view, that the earth is the sole source of riches; and that agriculture is what multiplies them." Maxime économique d'un royaume agricole. Physiocratie, p. 107.

^{+ &}quot;Il y en a environ la moitié qui se consomme immédi-"atement et en nature chez les cultivateurs. On ne peut "donc impuler à cette moitié, qui n'est pas commercable, ni

was by them deemed necessary to secure the production of future wealth, and to use their own language, they regard it not as wealth, but as a machine that must be carefully preserved, for the continual reproduction of wealth. *

So thoroughly do this sect of Philosophers attach their idea of public wealth to what constitutes the mass of individual

"l'augmentation des prix, ni l'augmentation des dépenses 46 causée par le renchérissement. Ainsi elle ne doit pas en-" trer dans le calcul du changement de prix dont il s'agit ici, " puis qu'elle n'entre pas dans le commerce, et que la con-" sommation qui en est faite constamment chez les cultiva-" teurs, n'augmente ni ne diminue, dans les changemens du " prix, les frais d'exploitation de la culture."-" About one-" half (of what is produced) is consumed immediately, in the " nourishment of the cultivators. To that half, then, which " is not the subject of traffic, cannot be imputed the augmen-" tation either of the value, or of the expenditure, occasioned "by the rise of price. Accordingly, it ought not to enter "into the calculation of the change of value, which is the "thing at present in question; since it is not the subject of " commerce, and since the consumption of it, which constant-" ly takes place among the cultivators, neither augments nor " diminishes, by alteration of price, the expence of improve-" ment and cultivation." Physiocratie, p. 188.

* "Les avances de l'agriculture d'un royaume, doivent être "envisagées comme un immeuble, qu'il faut conserver pré-"cieusement pour la production de l'impôt, du revenue, et de riches, that it is another of their maxims to consider the cheapness of the production of the earth as of no advantage to the people. * For they deem the revenue, that is, the wealth of the country, to be great in proportion as the value of the productions of the earth are high. Abundance, and high price, are, according to them, equally necessary to form wealth; †—two things Quesnay, the father of the system, would have known to be no more capable of co-

[&]quot;la subsistance de toutes les classes de citoyens."—" The davances made in the cultivation of a kingdom ought to be considered as an invariable quantity, which must be carefully preserved for the production of the imposts, of the revenue, and of the subsistence of every class of citizens." Physiocratie, p. 109.

^{* &}quot;Le bon marché des denrées n'est pas avantageux au "petit peuple."—"The cheapness of commodities is not ad"vantageous to the common people." Physiocratie, p. 162.

^{† &}quot;Telle est la valeur vénale, tel est le revenu. Abondance "et non valeur n'est pas richesse. Disette et cherté est "misere. Abondance et cherté est opulence."—"The re"venue is always great in proportion as the exchangeable
"value of commodities is high. Abundance and cheapness
"do not constitute riches. Scarcity and dearth are misery.
"Abundance and dearness are opulence." Physiocratie,
p. 116.

existence than heat and cold, had he understood the nature of value.

It is, however, this idea which appears to make them exclude that part of the produce of the earth which is applicable to seed and the nourishment of the cultivator, from forming a part of national wealth. They considered it as an invariable quantity, which can never be brought into the market; which could not of course influence price; which they did not, therefore, deem a portion of wealth or riches,—two things invariably viewed by them as one and the same.

Even on their own principles, they are obviously so far wrong, as they exclude what is appropriated to the nourishment of the cultivator; for it is the seed alone that can by possibility be deemed an invariable quantity, as, undoubtedly in practice, scarcity, which always increases price, forms an encouragement to the cultivator to sell; and thus diminishes what is appropriated for his sustenance, in the same manner as it does that of any other labourer.

It must be remarked, too, that it is an undeniable inference from this doctrine, (which excludes the part of the produce applicable to seed and the sustenance of the cultivator from forming a part of national wealth,) that the more you can reduce the maintenance of the husbandman,—as the more will remain to be carried to the market, and of course to the account of net produce, so the greater must be the national wealth. Thus, the wealth of the nation is made to depend upon depriving the most important class of its inhabitants of a part of the objects of their desire.

But it does not seem to require much argument to set aside this opinion. If the distinction betwixt public wealth and private riches is founded in truth; if wealth has been rightly defined to consist of all those objects for which men possess a desire, it is impossible to discover why that which is applicable to the satisfaction of the desires of the husbandman, should not

as truly form a portion of our wealth, as that which is subservient to the desires of any other labourer. Neither can we, with any propriety, exclude that part of the annual produce reserved for seed, from forming a portion of wealth, merely because it is not employed in satisfying our immediate desires, but is devoted to the formation of that which is to administer to them at a more remote period.

It is on these grounds that the whole of the fruits of the earth, as well as the produce of mines and fisheries, must be considered as component parts of public wealth.

2. Of Labour, as a Source of Wealth.

That species of labour which has been described as employed in meliorating the quality, and increasing the quantity of the natural produce of the surface of the earth, has universally been considered and ac-

knowledged as a source of wealth. That it is pre-eminently so, cannot be doubted by any one who reflects on the quantity of food and materials for clothing, that art enables man to extract from a very small part of the surface of the earth, and compares it with what nature any where affords. What a contrast betwixt the situation of the solitary savage who, with difficulty, extracts his maintenance from a district around him, and that of a peasant ina cultivated country, who draws from a few fields wherewithal to maintain many of his own species! The inhabitant of the country of the Iroquois, or of any other American nation, who lives on the produce of the chace, can hardly be supposed to collect his food from a range of less than fifty acres; whilst, in China, the rice field is supposed to yield three crops a-year, each returning one hundred fold, producing on fifty acres nourishment sufficient for five hundred peasants.

In the vicinity of London, we know that the value of the produce of an acre under garden culture, may be moderately calculated at L. 200. * Thus the produce of fifty acres, hardly sufficient in a state of nature to furnish the precarious sustenance of a poor American, becomes competent to enable an inhabitant of this country to enjoy all the refinements of European luxury.

* The following estimate was made by a gardener who occupied nine acres, situated about two miles further from market, as his opinion, of the produce of the soil at the neat-houses before-mentioned, to wit,

The radishes,	-	•	-	L. 10
Cauliflowers, frequen	tly L. 7	o or mo	re, but sa	y 60
Cabbages, -		-		30
Celery, the first crop not unfrequently upwards of				
L. 60, but say		-		50
Endive, -	-	-	-	30
Celery, second crop,	•			40
				-
				L. 220

This he stated as an estimate rather under the mark. Middleton's Report on the County of Middlesex, p. 264. See also p. 267.

Notwithstanding the superiority which the labour of the husbandman enjoys over that of all other labourers in the production of national wealth, it does not appear that every other species of labour can, with justice or propriety, be considered as totally unproductive. This opinion, however, is expressly maintained by the economists, who hold that even the labour of the artificer and the manufacturer is totally unproductive. These philosophers uniformly regard a thing as wealth in proportion to its value.* Arguing on this principle, they assume, (what in none of their writings they prove,) that the value added by the manufacturer to the raw material, during his day's work, is exactly equal to the value of the food, clothing, &c. he has consumed; and then they infer, (what, if

^{*} Posons maintenant en principe, que la valeur vénale est la base de toute richesse, que son accroisement est accroisement de richesse.

"Let us lay down as a principle, that value in exchange is the basis of wealth, and that its increase constitutes an increase of wealth." Philosophie Rurale, ou Economie Générale et Politique de l'Agriculture. See also note, 127.

they are right in this assumption, is undoubted, that during the course of the day he can have added nothing of value to the stock of the nation.

The ingenious men, who hold these opinions, distinguished for a close, subtile, and nervous manner of maintaining them, have not, with all their ingenuity, done so much to support this doctrine, as the author of the Wealth of Nations, by the manner he has attempted to refute it.

"The capital error of this system," says
Dr Smith, "seems to lie in its representing
the class of artificers, manufacturers, and
merchants, as altogether barren and unproductive. The following observations
may serve to show the impropriety of
this representation.

"1. This class, it is acknowledged, re"produces annually the value of its own
"annual consumption, and continues, at
"least, the existence of the stock or capital
"which maintains and employs it. But
"upon this account alone the denomina"tion of barren or unproductive should

" seem to be very improperly applied to it. " We should not call a marriage barren or " unproductive, though it produced only a " son and a daughter, to replace the father " and mother; and though it did not in-" crease the number of the human species, "but only continued it as it was before. "Farmers and country labourers, indeed, " over and above the stock which maintains " and employs them, reproduce annually a " neat produce, a free rent to the landlord. " As a marriage which affords three chil-"dren is certainly more productive than " one which affords only two; so the la-"bour of farmers and country labourers is " certainly more productive than that of " merchants, 'artificers, and manufacturers. "The superior produce of the one class, " however, does not render the other bar-"ren or unproductive." * Now this comparison really appears, instead of a refutation, to be a confirmation of the doctrine of the economists; and even to

^{*} Wealth of Nations, Vol. II. p. 272. 4to edit.

carry along with it an avowal of the opinion, that manufacturing labour is not productive of an increase of wealth.

A marriage which only produces two, cannot increase the numbers of the human species; for these two (as is observed) can only supply the places of the father and mother. The inference, therefore, appears to be, that, as such a marriage can only continue, and nowise contribute to the increase of, the human species, so manufacturing labour, as the economists strictly hold, can only preserve the wealth of the nation undiminished, notwithstanding the consumption of the manufacture; but can nowise contribute to its increase.

"2. It seems, upon this account, altogether improper to consider artificers,
manufacturers, and merchants, in the
same light as menial servants. The labour of menial servants does not continue the existence of the fund which
maintains and employs them. Their
maintenance and employment is altogether at the expence of their masters, and

"the work which they perform is not of a " nature to repay that expence. That work " consists in services which perish general-" ly in the very instant of their perform-" ance, and does not fix or realize itself in "any vendible commodity which can re-" place the value of their wages and main-" tenance. The labour, on the contrary, of "artificers, manufacturers, and merchants, " naturally does fix and realize itself in " some such vendible commodity. It is " upon this account, that, in the chapter in "which I treat of productive and unpro-"ductive labour, I have classed artificers, " manufacturers, and merchants, among the "productive labourers, and menial ser-" vants among the barren or unproduc-66 tive." *

Here, without stating any further objection to the opinion that is meant to be refuted, the outline is given of that distinction betwixt productive and unproductive labour, which is maintained by the Author;

^{*} Wealth of Nations, Vol. II. p. 273. 4to edit.

the merits of which must be considered in the proper place.

"3. It seems upon every supposition "improper to say, that the labour of artifi-" cers, manufacturers, and merchants, does " not increase the real revenue of the so-"ciety. Though we should suppose, for " example, as it seems to be supposed in "this system, that the value of the daily, "monthly, and yearly consumption of this "class, was exactly equal to that of its "daily, monthly, and yearly production; " yet it would not from thence follow, that "its labour added nothing to the real re-"venue, to the real value of the annual " produce of the land and labour of the so-"ciety. An artificer, for example, who, " in the first six months after harvest, exe-"cutes L. 10 worth of work, though he " should, in the same time, consume L. 10 "worth of corn and other necessaries, yet " really adds the value of L. 10 to the an-" nual produce of the land and labour of "the society. While he has been consuming " a half-yearly revenue of L. 10 worth of

"corn and other necessaries, he has pro-6 duced an equal value of work, capable of " purchasing either to himself, or to some " other person, an equal half-yearly revenue. "The value, therefore, of what has been a consumed and produced during these " six months, is equal, not to L. 10, but to " L. 20. It is impossible, indeed, that no "more than L. 10 worth of this value may " ever have existed at any one moment of "time. But if the L. 10 worth of corn, " and other necessaries which were consum-"ed by the artificer, had been consumed " by a soldier or by a menial servant, the " value of that part of the annual produce "which existed at the end of the six "months, would have been L. 10 less than " it actually is, in consequence of the labour " of the artificer. Though the value of what "the artificer produces, therefore, should " not, at any one moment of time, be sup-" posed greater than the value he consumes, " yet at every moment of time, the actual-" ly existing value of goods in the mar-"ket is, in consequence of what he pro"duces, greater than it otherwise would be."*

The wealth of the nation is undoubtedly greater, at every moment of time, than it would be if the manufacturer was supposed to consume without working, or adding any value to the raw material; but on the hypothesis here stated, that the workman, in the first six months after harvest, should execute L.10 worth of work, and that in the same time he should consume L. 10 worth of corn and other necessaries, as he has subtracted from the national capital a sum equal to that which he has added to it, if wealth is regarded as dependent on exchangeable value, it is difficult to perceive how he should be deemed to have increased the national stock by such an existence.

Triumphantly, however, as this leading tenet of the economists seems to have withstood this attack, it is impossible to subscribe to the opinion, that the labour of the

^{*} Wealth of Nations, ubi supra.

manufacturer and the artist are totally unproductive of wealth.

There are two modes of viewing this subject. Wealth may be regarded as constituted by price or exchangeable value; or it may be viewed in the real light in which it ought to be considered, as consisting in the abundance of the objects of man's desire.

If we regard wealth to be constituted by exchangeable value, and agree in the maxim, that value is the basis of all riches, and that an increase of value is an increase of riches, there seems to be an end of the question; for, in that view of the subject, it is as impossible to contend, that the labour of the manufacturer or artist does not add something to the wealth of the nation, as it is impossible to believe that a painter, whose works have sold for thousands of pounds, and the value of which has been known to have increased for a century after his death, added nothing more to the value of the canvas than the value of his sus-

tenance, and an equivalent for the expence of his education.

If, on the other hand, wealth is considered as it ought to be, as consisting of the greatest possible abundance of the objects of men's desires, this question requires a little further investigation.

It may be said, that, according to this opinion, abundance, in proportion to demand, constitutes wealth: but that abundance, in proportion to demand, must always diminish price. It may even be said, that it has been explained, how, if pushed to an extreme, it must extinguish value; that as long, however, as exchangeable value exists unextinguished by public opulence, the lowest possible price of all the productions of art must be the sustenance of the artist; for without receiving this, he could not exist: and it may be alleged, that, on this principle, it therefore seems, that the wages which denote the greatest degree of public opulence in works of art, are those which equal in value the subsistenceof the artist.

The value really added by the manufacturer to the raw material, in the present state of things, is, in this view of the subject, conceived to proceed from the scarcity of manufacturing skill. Like the price of monopoly, it is the highest that can be got. The talent of the artist being rare, from the small number of them that arrive at perfection in the arts, is supposed to impose a tax upon the public, which would not exist if the nation had a greater number of them; that is, if it possessed greater opulence in artists: and it is undoubtedly true, that it is possible to imagine talents so multiplied, and the number of artists so abundant, as to reduce the wages of painters and sculptors to be no more than what is equivalent to their sustenance; and that, in this state, a nation would enjoy the greatest possible degree of opulence in the productions of art, consistent with the existence of exchangeable value.

But this is, unfortunately, a situation which can exist only in imagination. The monopoly arising from skill, talent, and genius, is not an evil proceeding from the absurd regulations of man; it is stamped on the human species by the hand of nature, and must exist as long as genius adorns the world.

There is great difference in the value of land. One field possesses much more intrinsic fertility than another; and it is true, that if a happy convulsion of nature was at once to render the whole face of the earth equally fertile, we should cease to remark on the fertility of that favourite spot, on the same principle that we should cease to value the labour of the manufacturer and the artist, if he was equalled in skill, taste, and dexterity, by every common labourer. But as long as the world remains constituted as it is, we must continue to admire the fertility of the field, and to consider the labour of the manufacturer and the artist as productive.

It must also be remarked, that, even if the nature of things were so far altered that the works of the manufacturer and artist should become so abundant in proportion to the demand for them as universally to reduce the wages of manufacturers and artists to what in value was merely equivalent to their sustenance, (if wealth truly consists in the abundance of the objects of man's desire,) we should be obliged, as long as the love of conveniency and taste is incident to mankind, to consider the manufacturer and artist as productive labourers, on the same principle that we have regarded water as an article of public wealth.

In truth, it is only from the circumstance of confounding wealth and riches, and considering wealth, in the course of their reasoning, at one time as depending on exchangeable value, and at another as constituted by the abundance of the objects of man's desire, that this doctrine of the economists can for a moment be maintained. For supposing that an artist or manufacturer added only the value of his maintenance to the raw material, if wealth is to be understood in its true sense, his labour, even in this case, must be considered as

productive of wealth. The nourishment on which he subsists is wealth, because it is an object of man's desire. In satisfying the desire of the labourer, it has fulfilled the duty it is destined to perform; whilst, on the other hand, in consequence of the form given to the raw material by his industry, a distinct portion of wealth is brought into existence, ready to satisfy the desire of some other individual; so that, admitting that at no one period there existed, in consequence of his industry, an additional value, still it is evident that, in consequence of the industry of the manufacturer, there is a portion of desire satisfied, and of course a portion of wealth created, which would not otherwise have existed.

These philosophers hold, (and it is a necessary inference from their doctrine,) that it is immaterial to a country whether a web of cloth is exported in exchange for foreign commodities, or whether the same commodities are acquired by exporting the wool of which the cloth is made, and the food on which the weaver has existed. Nay, they

even conceive, that the exportation of the raw materials is the most advantageous.*

There is obviously, however, a material difference; for, in the former case, the country acquires as much of foreign commodity as in the latter; and, besides that, one of its inhabitants is maintained: that is, he has enjoyed his share of public wealth, by obtaining the objects of his desire.

By the author of the Wealth of Nations, the manufacturer and the artist are indeed admitted to be productive labourers; and, in this respect the distinction he makes betwixt productive and unproductive labour, is less repugnant to the prevalent opinions of men; but a little examination will shew that it is not more consonant to reason.

^{* &}quot;Si l'on considere simplement le commerce d'exportation dans un royaume agricole, qui peut devenir d'un grand commerce exterieur des denrées du cru, lequel doit être favorise preferablement à tout autre."—"If one considers merely the commerce of exportation in an agricultural kingdom, that can acquire a great external commerce, by disposing of its raw materials, which ought to be favoured in preference of every other species of commerce." Philosophie Rurale, p. 371.

He considers as unproductive labourers all those whose " services perish in the very "instant of their performance, and does " not fix or realize itself in any vendible " commodity, which can replace the value " of their wages and maintenance." * Productive labour, on the contrary, he describes as "fixing and realizing itself in some par-"ticular subject and vendible commodity. " It is as it were a certain quantity of la-"bour stocked and stored up, to be em-" ployed, if necessary, upon some other oc-" casion. That subject, or, which is the " same thing, the price of that subject, can " afterwards, if necessary, put into motion "a quantity of labour equal to that which "had originally produced it." †

Unfortunately, however, a little consideration makes this distinction appear nowise founded on the nature of labour, but merely dependant upon the use that is made of its produce. This the same labour may

^{*} Wealth of Nations, Vol. II. p. 273. 4to edit.

⁺ Ibid. Vol. I. p. 401.

appear either productive or unproductive, according to the use subsequently made of the commodity on which it was bestowed. If my cook, for example, makes a tart which I immediately consume, he is considered as an unproductive labourer; and the act of making the tart as unproductive labour; because that service has perished at the moment of its performance; but if the same labour is performed in a pastry cook's shop, it becomes productive labour, because it is a quantity of labour stocked and stored up, to be employed, if necessary, upon some other occasion; the price of it, if necessary, can afterwards put into motion a quantity of labour equal to that which had originally produced it. Again: A piece of cloth burnt immediately after it was formed, would inevitably bestow, according to this definition, the character of unproductive on the labour of the cloth-manufacturer. Thus, a tart being placed in a cook's shop, would give to the labour of the cook the character of productive, and the cloth being put

in the fire, bestows that of unproductive on the labour of the manufacturer.

This extraordinary distinction, founded on the mere durability of the services performed, classes as unproductive labourers, some of those who are occupied in rendering the most important services to society. Thus the Sovereign, and all who are employed in the maintenance of the religion, the justice, or the defence of the state, as well as those whose skill and care are occupied in superintending the health and education of the society, are alike deemed unproductive labourers. *

If exchangeable value is to be considered as the basis of wealth, it is needless to use much argument to explain the errors of this doctrine. The practice of mankind, in estimating these services, if we can judge by what is paid for them, bears sufficient testimony of its inaccuracy.

If, on the other hand, wealth is regarded in its true light, as consisting of the

^{*} Wealth of Nations, Vol. I. p. 401, 4to edit.

abundance of the objects of man's desire, it is impossible to discern why that should not be considered as wealth which tends to the satisfaction of man's immediate desires, as well as that which is stocked and stored up for the satisfaction of his future desires. It is curious that the theory of the economists should have led them to exclude the grain reserved for seed from forming a portion of wealth, because devoted to the formation of what is to administer to our future desires; whilst, on the other hand, the author of the Wealth of Nations excludes the labour of the class he describes as unproductive labour, merely because it contributes to the satisfaction of the immediate desires of those who employ them.

In truth, however, he cannot maintain this opinion with any degree of consistency, for there is no one who has ridiculed the idea of considering the durability of commodities as the criterion of their value, with greater acrimony, than the person who makes this distinction betwixt productive and unproductive labour,

grounded upon the duration of its produce. "We do not (says he) reckon that "trade disadvantageous, which consists in "the exchange of the hardware of England " for the wines of France, and yet hardware " is a very durable commodity, and was it " not for this continual exportation, might, " too, be accumulated for ages together, to "the incredible augmentation of the pots " and pans of the country." * Again: it is a losing trade, it is said, "which a work-" man carries on with the ale-house; and "the trade which a manufacturing nation "would naturally carry on with a wine " country, may be considered as a trade " of the same nature. I answer, that the "trade with the ale-house is not necessa-"rily a losing trade." †

It appears, therefore, impossible to contend, that the labour of the manufacturer and artist, or even the labour of that class whose services perish at the moment, are

^{*} Wealth of Nations, Vol. II. p. 15. 4to edit.

[†] Ibid. p. 80.

not, as well as that of the husbandman, to be considered as productive of wealth. The comparative degree of utility of different descriptions of labour in producing wealth, is a subject which will be more properly discussed in treating of the means of increasing wealth.

3. Of Capital, as a Source of Wealth.

In treating of land as a source of wealth, it was unnecessary to enter into any discussion of the means by which it contributes towards the public stock. These it evidently derives from the produce of mines and fisheries, and from the materials for food and clothing that abound on the face of the earth. This discussion was equally unnecessary in treating of labour as a source of wealth. It is clear, that the labour of the husbandman contributes to the formation of wealth, by means of the increased fertility he creates; and though it has been disputed whether the manufacturer and me-

nial servant produce wealth, by adapting and preparing the raw material for our convenient consumption, yet it is self-evident, that if they increase the wealth of the nation, it is by giving form to the raw material, and preparing it for use.

By what means capital or stock contributes towards wealth is not so apparent. What is the nature of the profit of stock? and how does it originate? are questions the answers to which do not immediately suggest themselves. They are, indeed, questions that have seldom been discussed by those who have treated on political economy; and, important as they are, they seem nowhere to have received a satisfactory solution.

The author of the Wealth of Nations appears to consider the profit of stock, as paid out of, and therefore derived from, the value added by the workman to the raw material. He states, that—" As soon "as stock has accumulated in the hands of particular persons, some of them will na-" turally employ it in setting to work in-

"dustrious people, whom they will supply "with materials and subsistence, in order "to make a profit by the sale of their "work, or by what their labour adds to "the value of the materials. In exchang-" ing the complete manufacture, either for "money, for labour, or for other goods, " over and above what may be sufficient "to pay the price of the materials, and the " wages of the workmen, something must " be given for the profits of the undertaker " of the work who hazards his stock in this " adventure. The value which the work-"men add to the materials, therefore, re-" solves itself, in this case, into two parts, " of which the one pays their wages, the " other the profits of their employer upon "the whole stock of materials and wages "which he advanced." * And again, "The " labour of a manufacturer adds generally " to the value of the materials which he " works upon, that of his own maintenance " and of his master's profit." †

^{*} Wealth of Nations, Vol. I. p. 57, 4to edit.

[†] Ibid. p. 400. The following passage also clearly shows that Dr Smith thought the profit of stock was a value added

Above a century ago, Mr Locke stated pretty nearly the same opinion. "Land," says he, "produces naturally something "new and profitable, and of value to man- kind; but money is a barren thing and produces nothing; but by compact trans- fers that profit that was the reward of one man's labour into another man's pocket."*

If this, however, was a just and accurate idea of the profit of capital, it would follow, that the profit of stock must be a derivative, and not an original source of revenue; and capital could not therefore be considered as a source of wealth, its profit being only a transfer from the pocket of

by the labourer: "The stock which is lent at interest is always "considered as a capital by the lender. He expects that in "due time it is to be restored to him, and that in the mean "time the borrower is to pay him a certain annual rent for the "use of it. The borrower may use it either as a capital, or "as a stock reserved for immediate consumption. If he uses "it as a capital, he employs it in the maintenance of productive labourers, who reproduce the value with a profit." Wealth of Nations, Vol. I. p. 426.

[•] Some Considerations of the Consequence of lowering Interest, and raising the Value of Money. Edition 1692, p. 53.

the labourer into that of the proprietor of stock.

The ingenious author of the Treatise on the Formation and Distribution of Riches, seems to think, that a proprietor of stock is entitled to a compensation for what his capital would have produced him, had he employed it in the acquisition of land. * But this in practice is known not even to furnish a rule for the quantum of profit,

This account of the origin of capital, however unsatisfactory, is also given by Sir William Petty, as well as many other authors.

"Question 28. What is interest or use-money? Answer.

" A reward for forbearing the use of your own money for a "term of time agreed upon, whatsoever need yourself may

" have of it in the mean while."

Sir William Petty's Quantulumcunque, concerning money.

" Money was at all times, and in all places, admitted to be "an equivalent for houses and lands; and houses and lands

" were always admitted to possess the quality of producing a

" rent. Now, if houses and lands do (of natural right) ac-"tually possess this quality of producing a rent, and money be

" actually an equivalent for houses and lands, it must neces-

" sarily follow that money must (by the same natural right) " possess the quality of producing a rent also." Essay on the

Nature and Principles of Public Credit. By S. Gale, printed 1784, p. 15.

* Reflection sur la Formation et Distribution des Richesses. Par M. Turgot, § 60

and certainly gives no idea, how or from whence it originates.

Capital is so variously employed, that in order to convey a just and distinct idea of the mode in which, under all circumstances, it becomes entitled to a profit, it is necessary to enumerate the different uses to which it may be devoted.

- 1. It may be employed by the manufacturer in building and obtaining machinery.
- 2. It may be employed in procuring and conveying to the manufacture the raw materials, in advance of wages, or conveying the manufactured commodity to the market, and furnishing it to the consumer; that is, in the home-trade.
- 3. It may be employed either in the importation of the commodities of another country, or the exportation of home-manufactures; that is, in foreign trade.
 - 4. It may be employed in agriculture.
- 5. There is a part of the capital of every country employed merely for the purpose of circulation; a greater or a smaller proportion of which is necessary for conduct-

ing the transactions of every member of the community.

In enumerating the various modes in which capital may be employed, with a view to consider how it becomes entitled to a profit, it is unnecessary to state that of lending it on landed, and that of lending it on personal security. If lent to the proprietor of land, the owner of the capital becomes, under certain conditions, a partner and joint proprietor in the land. If lent to a person who has no land, the proprietor of the capital, under similar conditions, becomes a sharer either in the profits of professional labour, or of stock, according as the borrower derives his revenue from his labour or his capital. Thus the profit which capital lent out acquires, is a transfer from one to another of what already exists, and cannot, therefore, properly, be said to be produced.

It appears, then, that every means of employing capital, so as to produce a profit, is described under some one of these five modes enumerated, by which capital be-

comes entitled to a profit. On examination, we shall find, that even when so employed, part of its profit, in some cases, may be more properly said to be acquired than produced.

Now, it is apprehended, that in every instance where capital is so employed as to produce a profit, it uniformly arises, either—from its supplanting a portion of labour, which would otherwise be performed by the hand of man; or,—from its performing a portion of labour, which is beyond the reach of the personal exertion of man to accomplish.

1. Of the Method in which that Portion of Capital produces its Profit, which is employed in Building and obtaining Machinery.

THERE is no part of the capital of a country, that more obviously derives its profit from supplanting a portion of labour that would otherwise be performed by man, or

from performing a portion which is beyond the reach of his personal exertion, than that which is vested in machinery. That man uses capital in the form of machinery to supplant labour, is one of the peculiarities and distinguishing features of his character. If it was not for this singular faculty, his efforts to provide for his wants, like those of the other animals, would be bounded by what his hands, his teeth, and his feet, could enable him to accomplish.

That we may perceive how the profit of capital thus employed arises from supplanting labour, let us consider the effect of capital vested in machinery, in that first employment of man, the cultivation of the ground. The moment he places a portion of capital in the acquisition of a spade, one man must obviously, in the course of a day, be able, with his spade, to prepare as much land for receiving seed, as fifty could, by the use of their nails. Thus, this portion of capital supplants the necessity of the labour of forty-nine men. In the progress of things, a portion of the national capital

comes to be invested in a plough; and one man, with his plough, will prepare as much land for the reception of seed as perhaps six could with their spades. Thus, that portion of capital invested in a plough, supplants the necessity either of the labour of five diggers, or of two hundred and ninetynine men reduced by absolute want of capital to use their nails.

Again, if we consider the employment of capital in the formation of machinery, in one of the operations the most familiar,—that of making stockings; the wires employed in knitting, the first means of stocking-making, affords a simple instance of a portion of capital employed in executing labour beyond the reach of the power of man to accomplish; as without such assistance, we could hardly suppose him capable of making a pair of stockings. But, in the further progress of this art, a part of the capital of the country becomes vested in a stocking-loom; * and the profit of the capital

^{*} It is contended in France, that the first stocking-loom was introduced by Jean Hundret, in the year 1656, in his ma-

so employed, is derived from the stockingloom's supplanting the labour of a number of knitters. That this is the source of the profit arising from the machine, appears clearly from the circumstance, that the wages of those knitters whose labour it supplants, form, on the one hand, the measure of the utmost possible extent the proprietor of the machine can charge; and, on the other, the ground on which mankind judge of the utility of the invention.

Supposing, for example, one man with a loom should be capable of making three pair of stockings a-day, and that it should require six knitters to perform the same work with equal elegance, in the same time; it is obvious, that the proprietor of the loom might demand, for making his three pair of stockings, the wages of five knitters, and that he would receive them;

nusactory at the Chatteau de Madrid, Bois de Bouloigne. The Frame-work Knitters Company, attributing the invention to William Lee of St John's College, Cambridge, have adopted, as one of the supporters to their arms, a Master of Arts in his gown and cap. See Anderson's History of Commerce, and Encyclopedie, Article Bas.

because the consumer, by dealing with him rather than the knitters, would save in the purchase of the stockings the wages of one knitter. But if, on the contrary, a stocking-loom was only capable of making one pair of stockings in three days, as, from the hypothesis that three pair of stockings could be finished by six knitters in one day, it follows, that one knitter would make a pair of stockings in two days; the proprietor of the loom could not dispose of his stockings; because he would be obliged to charge one day's wages more than was paid to the knitters; and the machine, though it executed the stockings in the greatest perfection, would be set aside as useless, merely because incapable of supplanting any portion of labour.

The small profit which the proprietors of machinery generally acquire, when compared with the wages of labour, which the machine supplants, may perhaps create a suspicion of the rectitude of this opinion. Some fire-engines, for instance, draw more water from a coal-pit in one day, than could

be conveyed on the shoulders of three hundred men, even assisted by the machinery of buckets; and a fire-engine undoubtedly performs its labour at a much smaller expence than the amount of the wages of those whose labour it thus supplants. This is, in truth, the case with all machinery. All machines must execute the labour that was antecedently performed, at a cheaper rate than it could be done by the hand of man; otherwise they would inevitably share the fate of the supposed stocking-loom, which could manufacture only one pair of stockings in three days, and be laid aside as useless.

The actual profit drawn for the use of any machine, when universally adopted, must be regulated on the same principle with the hire of a field, or the payment of an artist, or the price of any other commodity; that is, by the proportion betwixt the quantity of machines that can be easily procured, and the demand for them. But that the profit of stock employed in the machinery is paid out of a fund that would

otherwise be destined to pay the wages of the labour it supplants, is evident; because, if the proprietors of all the capital so employed, would combine to charge a greater sum for the use of the machines than the wages of the labour supplanted, they would be instantly set aside, and the same portion of the revenue of the nation again employed in the payment of wages, that was so directed before the machines were invented.

The case of a patent, or exclusive privilege of the use of a machine, usually granted, as the law of England now permits, for fourteen years, to reward an ingenious invention, will tend further to illustrate this.

If such a privilege is given for the invention of a machine, which performs, by the labour of one man, a quantity of work that used to take the labour of four; as the possession of the exclusive privilege prevents any competition in doing the work, but what proceeds from the labour of the four workmen, their wages, as long as the patent continues, must obviously form the

measure of the patentee's charge; that is, to secure employment, he has only to charge a little less than the wages of the labour which the machine supplants. But when the patent expires, other machines of the same nature are brought into competition; and then his charge must be regulated on the same principle as every other, according to the abundance of machines, or, (what is the same thing,) according to the facility of procuring machines in proportion to the demand for This alteration, however, in the rule of charging, does not prevent the profit of the machine being received out of a fund of the same nature of that which it was paid from before the expiration of the patent; to wit, from a part of the revenue of the country, destined, antecedent to the invention of the machine, to pay the wages of the labour it supplants. *

^{*} The theory of the Author of the Wealth of Nations made him regard the profit of stock as derived from the labour of the productive manufacturer; yet there are passages in his work that strongly tend to confirm the opinion here maintained. For example: "Both in the coarse and in the fine wool-

Though, in confirmation of this opinion, it is impossible to cite the theory of any learned author who has treated of political economy, it has, however, in its favour, what is perhaps fully better; it derives

e len manufacture, the machinery employed was much more " imperfect in those ancient than it is in the present times. " It has since received three very capital improvements, be-" sides, probably, many smaller ones, of which it may be dif-66 ficult to ascertain either the number or the importance. "The three capital improvements are, first, The exchange of " the rock and spindle for the spinning-wheel, which, with " the same quantity of labour, will perform more than double " the quantity of work. Secondly, The use of several very " ingenious machines, which facilitate and abridge, in a still " greater proportion, the winding of the worsted and woollen " yarn, or the proper management of the warp and woof, be-" fore they are put into the loom; an operation which, pre-" vious to the invention of those machines, must have been " extremely tedious and troublesome. Thirdly, The employ-" ment of the fulling-mill, for thickening the cloth, instead of " treading it in water. Neither wind nor water-mills of any " kind were known in England so early as the beginning of the " sixteenth century, nor, so far as I know, in any other part " of Europe north of the Alps. They had been introduced " into Italy some time before.

"The consideration of these circumstances may, perhaps, in some measure, explain to us why the real price both of the coarse and of the fine manufacture, was so much higher in those ancient than it is in the present times. It cost a greater er quantity of labour to bring the goods to market." Wealth of Nations, Vol. I. p. 310. 4to edit. See also p. 306.

ample testimony of its truth from the conduct of the unlettered manufacturers themselves, as is sufficiently evinced by the riots that have taken place on the introduction of various pices of machinery, and particularly at the time the ingenious machines for carding and spinning were first set a-going.

2. Of the Method in which that Portion of Capital produces its Profit, which is employed in procuring and conveying to the Manufacturer the raw Materials, in advance of Wages; or in conveying the manufactured Commodity to the Market, and furnishing it to the Consumer;—that is, in the Home Trade.

If it has been made evident, that the share of the capital of a country vested in machinery derives its profit from supplanting labour, a little consideration will make it equally clear, that the stock employed in procuring and conveying to the manufacturer the raw materials in advance of

wages, or in conveying the manufactured commodity to the market, and furnishing it to the consumers, derives the profit it produces from the same source. The term produces, is here purposely used; because it will appear, on analysing the grounds on which the proprietors of this portion of national capital become possessed of their profit, that they are entitled to acquire a profit, besides that which their stock can be properly said to produce.

That we may possess a clear view of the manner in which this part of the national capital becomes entitled to its profit, let us suppose that all at once it was abstracted from any society, and that each consumer was obliged to perform himself the services he now derives from the capital which is employed in procuring and conveying to the manufacture the raw materials in advance of wages, or in conveying the manufactured commodity to the market, and furnishing it to the consumer.

It is impossible, consistent with brevity, accurately to trace all the steps a consumer.

would be obliged to pursue to acquire any commodity, if this part of the capital of a country was abstracted; and, fortunately, it is only necessary to describe it generally, so as, by giving a view of the nature of the duty he would perform, to exhibit the method in which capital thus employed acquires its profit.

As the national capital at present stands appropriated, if a pair of stockings is wanted, they may be had by the consumer at the shop of the hosier. But if the part of the national capital which is employed in conducting them into that situation, was abstracted from any society, the consumer would be obliged, in the first instance, to quit his usual occupation, and repair to the sheep-farmers, for the purpose of procuring a quantity of wool. Having bought and paid for the wool, he would be then under the necessity of conveying it to the carder and spinner, whose wages he must advance. He would next be obliged to go in quest of the thread, when spun, to convey it to be dyed, and to pay the wages of the dyer.

Finally, he must undertake the task of conveying the thread from the dyer to the stocking-maker, of paying him his wages, and of carrying the stockings home.

On examining the task thus imposed on the consumer, it seems to consist in two different duties.

- 1. He is compelled, by abstracting this part of the national capital, to withdraw from his own stock the money with which he pays the wool, that with which he pays the carder and spinner, and that with which he pays the dyer, some time before he acquires the use of the stockings, which must create a loss of the profit he might derive by retaining this portion of capital in his own employ.
- 2. He is obliged to perform the labour requisite for selecting the wool, the labour of carrying it to be carded and spun, the labour of conveying it to the dyer, and lastly, that of taking it to the stocking-maker, and from thence home.

Now, these two duties, that would be thus imposed on the consumer, by abstracting the portion of capital employed in procuring and conveying to the manufacturer the raw materials in advance of wages, or in conveying the manufactured commodity to the market, and furnishing it to the consumer, give a just view of what is the source of the profit of capital so employed.

- 1. It seems entitled to a profit, on account of the consumer's being saved the necessity of an advance for payment of the wool, &c. But this profit cannot properly be said to be produced by the capital so employed; the capital thus engaged in the home trade can only be considered as having a right to acquire it; for this profit is evidently produced by the stock which is by this means allowed to remain in the hands of the consumer, and arises from the rent of land, if the consumer so employs his capital,—from agriculture, if he employs it in cultivating the land,—or from supplanting some other species of labour, if he employs it as a stock in trade.
- 2. It is entitled to a profit, because it exempts the consumer from the second class

of duties that have been enumerated. This profit it may be properly said to produce; and this is obviously produced by supplanting that labour which he would otherwise be compelled to perform.

Like the labour supplanted by stock vested in a machine, the value of these duties combined, forms, on the one hand, the measure of the utmost possible extent the proprietor of this portion of capital can charge; and, on the other, the ground on which mankind must judge of the utility of its being so employed.

For example: let us suppose that the consumer has made of profit from the money which the existence of this capital enables him to retain in his own employ, and which he would otherwise have been obliged to advance for the purchase of wool, &c. long before getting his stockings into his possession, the sum of sixpence; and let us further suppose, that the consumer values the labour it saves him, at five shillings: the utmost possible charge the proprietor of the capital

could make, over and above the payment of the wool, and wages of the spinner, dyer, and weaver, would be something under five shillings and sixpence; for if it exceeded this sum, the consumer would perform the duties himself, and the capital allotted to be so employed would be regarded as useless.

Again: though the charge might amount to five shillings and sixpence, as long as the competition in performing the duty remained solely betwixt the consumer of the stockings and one proprietor of stock, yet, as the price of performing the labour supplanted by a machine is at once settled on a different principle, when a number of machines come into competition; so when a number of different proprietors of stock present themselves for performing these duties, the actual charge is at once regulated in the same manner as the charge for the machine, when a number of machines come into competition; and, indeed, on the same principle as the price of all other things, it is determined

by the quantity of stock contending for the performance of these duties in proportion to the demand for it.

Finally, it must be remarked, that though the proprietor of capital so employed saves, by the use of it, the labour of the consumer, he by no means substitutes in its place an equal portion of his own; which proves that it is his capital, and not himself, that performs it. He, by means of his capital, perhaps does the business of three hundred consumers by one journey; and carts, boats, and a variety of other machinery, all tending to supplant labour, are applicable to the large scale in which he deals, from which a consumer could derive no benefit in procuring for himself the small quantity adapted to the satisfaction of his individual desires. 4. Of the Method in which that Portion of Capital produces its Profit, which is employed either in the Importation of the Commodities of another Country, or the Exportation of Home Manufactures;—that is, in Foreign Trade.

On this subject it is fortunately unnecessary to enter into so long a detail. The same reasoning we have used to shew that capital embarked in every branch of the home trade uniformly derives its profit from supplanting a certain portion of labour, is equally applicable to capital embarked in foreign trade. As the portion of labour supplanted by this description of capital is much greater, if the competition existed solely betwixt a single proprietor of stock and the consumer, his charge might be much higher.

Foreign trade is the exchange of the commodities of one distant part of the world for those of another, by which the desires of man are gratified with things which the habits of industry in another country enable the inhabitants to produce at a cheaper rate or of a better quality, or with things that he could not obtain from the soil around him, or in the climate in which he lives.

As in every case of trade, whether foreign or domestic, the consumer, if there existed no capital, must himself, in detail, pay for, or perform, every expence or portion of labour requisite to bring any commodity into his possession in the shape in which he desires it; if the raw material grows at a distance from him, and many of the steps in the process of giving it form, are conducted at a distance from one another, the portion of labour which the use of capital supplants must be greater. But the profit of capital employed in foreign trade, though it arises from supplanting labour, comes to be regulated, not by the value of the labour it supplants, but, as in all other cases, by the competition among the proprietors of capital; and it will be great or small in proportion to the quantity of capital that presents itself for performing the duty, and the demand for it.

Foreign trade, it must also be remarked, in the shipping it employs, furnishes the great example of capital engaged in performing that species of labour which is beyond the reach of the powers of man to accomplish; for man, even with the smallest quantity of any commodity, is incapable of swimming from islands to the continent;—from the old to the new world,—and of performing those long voyages which the modern skill in navigation enables the seaman to undertake.

The duty, however, which capital thus performs, and by which it produces its profit, is so obviously of the same nature, that it requires no explanation to shew that it consists in labour. *

^{*} The imagination of Voltaire has put into the mouth of the Philosopher, in the dialogue betwixt a Philosopher and a Comptroller of Finance, the following sentiment:—" Le com- merce fait le même effet que le travail des mains."

4. Of the Method in which that Portion of Capital produces its Profit which is employed in Agriculture.

LABOUR is the only means of improving the fertility of the earth.—

"Cursed is the ground for thy sake. In sorrow shalt thou eat of it all the days of thy life. Thorns also and thistles shall it bring forth to thee: and thou shalt eat the herb of the field. In the sweat of thy face shalt thou eat bread." *

And true it is, that, by the exertions of the labour of man alone, are food and materials for clothing extracted from the earth in sufficient quantity to supply his wants.

In shewing that stock vested in machinery draws its profit solely from the circumstance of supplanting labour, the effect of the spade and the plough, in which the husbandman vests part of his capital, has been already traced. It has been shewn,

^{*} Genesis, chap. iii.

that capital vested in those implements alone derives its profit from supplanting a portion of the labour that he would otherwise be obliged to perform; and the same reasoning is applicable to explain how the whole of his capital, vested in horses, carts, or any other machinery, derives its profit from the same circumstance.

"In a farm where all the necessary build"ings, fences, drains, communications, &c.
"are in the most perfect good order, the
"same number of labourers and labouring
"cattle will raise a much greater produce,
"than in one of equal extent and equally
"good ground, but not furnished with
"equal conveniences." *—Thus—"An im"proved farm may very justly be regarded
in the same light as those useful ma"chines which facilitate and abridge la"bour." † Though the Author of the
Wealth of Nations did not perceive that
capital vested either in agriculture or in
machinery derives its profit from supplant-

^{*} Wealth of Nations, Vol. I. p. 343. 4to edit,

⁺ Ibid. Vol. I. p. 335.

ing labour; yet it is evident from the passage here quoted, that he felt the similarity of their effects; and if, instead of regarding the effect of a machine as facilitating labour, or as increasing the productive powers of labour, * (as he expresses it,) he had perceived that capital vested in machinery acquires its profit by supplanting labour, he must have attributed the origin of the profit he here describes to the same circumstance.

But, indeed, all capital vested in any department of agriculture alike derives its profit from this source.

If the farmer employs stock or capital in manuring, that is, in mixing of soils, to increase fertility, the benefit he derives from it obviously consists in supplanting labour he would otherwise be under the necessity of performing, to procure the same quanti-

^{*} It is a strange confusion of ideas that has led Dr Smith to describe the operation of capital as increasing the productive powers of labour. The same process of reasoning would lead a man to describe the effect of shortening a circuitous road between any two given places, from ten miles to five miles, as doubling the velocity of the walker.

ty of produce. If by such process he can double the fertility of his field, the labour employed in the cultivation of one acre supplies the produce that would have been drawn from the labour bestowed on two; and, by the fertility thus bestowed, supplants the necessity of one-half of the labour antecedently requisite.

If he vests his capital either in seed of a particular quality, or in a stock of cattle and sheep of a peculiar fattening kind, he does this, that, with the same labour, he may grow more corn, or produce more beef or mutton. So truly does man's nourishment depend on the sweat of his face, that he can derive aid or assistance from nothing in increasing the fertility of the ground, but in proportion as it performs or supplants a part of the labour which he must otherwise of necessity submit to.

5. Of the Method in which that Portion of National Capital produces a Profit which is employed in conducting Circulation.

In considering how that portion of the national capital employed in conducting circulation produces a profit, it is necessary clearly to distinguish what forms circulating capital, from the goods that are circulated by means of capital; and this becomes the more so, because we are accustomed to see these two things, however different, almost uniformly confounded, by those who have treated on the subject. *

In the manner in which the circulation

^{*} In the Wealth of Nations, the circulating capital of a country is stated to be composed of four parts. The first is described as consisting of the money, by means of which all the others are circulated and distributed; the author thus plainly confessing, that the other three articles of which he imagined circulating capital to be composed, are not employed in circulating, but are actually goods to be circulated. They are, in fact, portions of what is reserved for consumption. Wealth of Nations, p. 326.

of most European countries is at present conducted, the circulating capital may be properly regarded as composed either of the coin, or of the substitutes for coin, which banking, and the modern facilities of conveying credit, have created. To these, therefore, we confine our views; conceiving them to form what may be, with strict propriety, denominated the circulating capital of a country; and a little examination will suffice to show, that gold and silver, as coin, are alone estimated by man for their utility in supplanting labour, as well as that the advantage which the public derives from the improved method of circulation, by means of banks, is founded on the same principle.

Money is of use to mankind in two different capacities; as an instrument of exchange; and as a practical standard, by which the value of all commodities is measured and expressed. To convey a clear idea how the portion of the national capital employed in executing these two duties

is profitable merely from the circumstance of its supplanting labour, perhaps no better method can be followed, than that which was pursued in examining the foundation of the profit of capital employed in the home trade.

Let us then consider what would be the effect of withdrawing from any society that part of its capital which is employed in conducting the circulation of goods, and in forming a practical standard, by which the value of commodities is measured and expressed.

The moment this portion of the national capital is abstracted from any society, the exchange of those things which nature or art enables one man to produce with greater ease or of better quality, for those things which similar circumstances enable another to produce with greater advantage, must be conducted by barter.

A farmer, for example, who had in his barn a quantity of wheat, much greater than the consumption of his family, and who de-

stined the overplus to supply the other articles necessary for their clothing and nourishment, if he wanted a pair of shoes, would be obliged to proceed with a quantity of his wheat to a shoemaker, to endeavour to negotiate an exchange; but as it might probably happen, that the first shoemaker he accosted, had already, in return for shoes, obtained all the wheat he meant to consume, he would be compelled to remain without shoes, till he could find a shoemaker who wanted wheat.

If, unfortunately, the whole profession were already supplied with wheat; to obtain a pair of shoes, he would be under the necessity of endeavouring to discover what was the article the shoemaker wished to procure; and if, on inquiry, it appeared that beer was the commodity with which the shoemaker wished to be supplied, the farmer must then attempt to procure from the brewer a quantity of beer in exchange for his wheat, as a preliminary to his future negotiation with the shoemaker.

But the brewer might also be supplied with wheat; which would oblige the farmer, in the first instance, to exchange his wheat for some commodity the brewer wanted, that with it he might purchase the beer, with which he afterwards meant to acquire his shoes.

Tedious as this process may appear, it is one of the simplest cases that could be stated, for the purpose of pointing out and explaining the laborious path which every man would be obliged to tread, in endeavouring to supply his wants by parting with his superfluities in a country deprived of all circulating capital; for it is plain, that the course would often be infinitely more tedious and intricate, before the goods of one man could be repeatedly bartered, till they at length became exchanged for that particular commodity which another wanted.

Neither is this the sole source of the labour that would be imposed on man, by withdrawing the capital employed in the conduct of circulation. As there would then exist no general standard by which the value of commodities was usually estimated, an inquiry must of necessity take place, in settling the terms of every particular exchange, to ascertain the relative value of the goods to be bartered.

For example: if the brewer to whom the farmer applied, wished to have some wheat, and it so happened, that neither the farmer had antecedently exchanged wheat for beer, nor the brewer beer for wheat, they would be at a loss to fix the quantity of wheat that should be given for a gallon of beer. If, indeed, each had luckily already procured a leg of the same sheep in exchange for the commodity they respectively possessed, they might then discover the relative value of the wheat and the beer, because two things, equal to one and the same thing, are equal to one another; but as it would probably happen, that the farmer and brewer had never exchanged wheat and beer for the same commodity, they could not

have recourse to this easy mode of deciding the portion of wheat that ought to be parted with for the acquisition of a given quantity of beer. The course, therefore, the farmer would have to pursue, even after he had undergone the labour necessary to discover a brewer who wanted wheat, might be infinitely laborious, before he could trace out, through the medium of various exchanges, some one interchange, that afforded a point of comparison betwixt the value of the wheat and the beer.

If this, however, could not be discovered, he would be obliged, as the only means of ascertaining the terms of the exchange, to institute an inquiry into the proportion betwixt the demand for, and the quantity of, the beer, and also into the demand for, and quantity of, the wheat; these being the circumstances on which the relative value of all commodities depends.

The beer being procured, it is plain, he might be under the necessity of repeating the same operation in negotiating the exchange for the shoes.

Thus, it is obvious, that the portion of the capital of a country employed in conducting circulation, is not only profitably employed, by saving the labour of man, in its character of an instrument for conducting exchanges, but also in its capacity of a standard, for measuring the value of commodities.

It is not, perhaps, at first sight, so apparent, that circulating capital is profitable to mankind from the circumstance of supplanting labour, as it is that the profit of a machine is derived from that source; but there is in reality no part of the capital of a nation that supplants a greater portion of labour, certainly none the benefit of which in supplanting labour is more universally enjoyed.

The labour of the manufacturer fixes and realizes itself in some vendible commodity. Its existence as productive labour is therefore more easily discernible than the labour of the menial servant, whose services generally perish at the instant of per-

formance. The labour of a manufacturing machine, in like manner, fixes itself in some vendible commodity, which makes the origin of its profit more apparent than that of circulating capital, whose services, like that of the menial servant, perish at the instant of their performance; but which, like his, too, remain at all times prepared to supplant the necessity of another portion of labour, which the master must otherwise perform. *

Though coin, employed as circulating capital, has been thus eagerly sought after, not for the sake of the gold and silver it

^{*} Neither the labour performed by the menial servant, nor that of which the necessity is supplanted by circulating capital, do naturally stock, or store themselves up in such a manner as to be transferred from one to another for a defined value. The profit of the one and the other alike arises from saving the labour of the owner or master. The similarity is indeed such, that it is natural to suppose the same circumstances which led the one to be deemed unproductive, would naturally create the same impression with relation to the other. Accordingly, the Author of the Wealth of Nations, who conceives the labour of the menial servant to be unproductive, informs us, that "the gold and silver money which "circulates in any country, and by means of which the pro-

contains, but merely on account of the labour it supplants; like other means of supplanting labour, it requires, though an inferior, yet a certain portion of labour to procure it. To carry it about, when procured, is also, from its bulk and weight, laborious. To save these remaining portions of labour, in conducting the circulation of a country, various modifications of banks have been successively introduced, highly beneficial to the community in which they have been established, from their supplanting the labour, formerly performed by the Sovereign, of procuring coin, and that performed by the subjects, of making payments in it; * and also from their executing, with a machine of little value, the

[&]quot;duce of its land and labour is annually circulated, and dis"tributed to the proper consumers, is, in the same manner
"as the ready money of the dealer, all dead stock. It is a
"very valuable part of the capital of the country, which pro"duces nothing to the country." Wealth of Nations, Vol. I.
p. 388, 4to edit.

There are various passages in Mr Thornton's book on

labour antecedently performed by a very expensive instrument.

From this last circumstance it is, that most countries undoubtedly derive what has been esteemed the greatest benefit they enjoy from the modern improved method of conducting the circulation of commodities. Yet it seems to be the desire of man to supplant labour that we are indebted for

Paper Credit, which may be cited in confirmation of the pro-Position, that supplanting of labour is the great object in the introduction of all substitutes for coin.—For example:

"To speak first of Bills of Exchange.—It is obvious, that however portable gold may be in comparison of any other article which might be made a measure of value, to carry it in quantities to a great distance must prove incommodious. Let it be supposed that there are in London ten manufacturers, who sell their article to ten shopkeepers in York, by whom it is retailed; and that there are in York ten manufacturers of another commodity, who sell it to ten shope keepers in London. There would be no occasion for the ten shopkeepers in London to send yearly to York guineas for the payment of the York manufactures, and for the ten York shopkeepers to send yearly as many guineas to London." He then proceeds to show the use of bills of exchange in supplanting labour. See p. 24.

Again, p. 54. "But further, if bills and bank-notes were extinguished, other substitutes than gold would unquestionably be found. Recourse would be had to devices of va-

the invention; for banks, we are told, were first introduced into Swedeland,* where the money being all of copper, it was highly inconvenient, by reason of its weight and bulk, to carry it about in such quantities as was necessary to conduct exchanges.

In truth, though a country may derive much benefit from having a cheaper medium of exchange, insomuch, that if there is a scarcity of capital, it will by this means have more or other uses; yet this consi-

[&]quot; rious kinds, by which men would save themselves the trouble of counting, weighing, and transporting guineas, in all the larger operations of commerce." See also the description he gives, p. 55. of the method in which London bankers make payments to one another, calculated for no other purpose but to supplant the necessity of a portion of labour which their clerks would otherwise be obliged to perform.

[&]quot;The use of banks has been the best method yet prac"tised for the increase of money. Banks have been used in
"Italy; but, as I am informed, the invention of them was
"owing to Swedeland. Their money was copper, which
"was inconvenient by reason of its weight and bulk. To re"medy this inconveniency, a bank was set up, where the
"money might be pledged, and credit given to the value, which
"passed in payments." Law on Money and Trade. Glasgow edit. p. 67.

deration never could form the motive of any individual, for preferring one medium of exchange to another. To the seller of a commodity, the value of the medium of exchange is perfectly indifferent, provided he is sure it is in equal estimation with those from whom he subsequently means to purchase. A man can alone have an interest in the value of what he produces, and what he consumes: but coin or its substitutes are never consumed; they only pass from one to another, for the purpose of saving labour in the conduct of exchange; and the only immediate interest that he who accepts a given quantity of any medium of exchange can have, is, that it should save as much labour as possible. It is on this principle that silver is preferred to an equal value of copper; that gold, in making large payments, is preferred to both; and that bills of exchange supplant, with advantage. the use of the metals in extended commercial concerns. *

^{* &}quot;Bills of exchange are a most useful invention for con"veying money with ease and safety from one part of the

Had the ingenious Abbé Morellet written for the purpose of illustrating what is here stated, he could not have given a more desirable definition of paper-currency than the following: "We understand by paper-"money, every acknowledgment of debt or obligation; in a word, every stipulation, by writing, betwixt a debtor and creditor, which obliges the former to pay, and authorises the latter to exact a value; and which being capable of conveyance, becomes a means of transfer-"ring the property of these values from one to another, without transporting the things valuable in substance.

"It is plain, that this definition applies to all notes, bills, and every species of bank-credit; to securities granted by go-

[&]quot;kingdom to another. In that light they may be said to re"semble a waggon carrying goods along a turnpike road, or
"a boat on a canal. So that the imposing too high a stamp
"duty on bills of exchange produces just the same effect on
"commerce, as the increase of tolls on a road, or of lockage
"dues." Memoir of the Bankers in Scotland, respecting the
proposed additional stamp duties on bills of exchange and
promissory notes, circulating as bank notes. 1804.

"vernments for money borrowed, as well as to all securities for money advanced in speculations of commerce or finance: finally, to credit given by one individual to another, in the form of bills of exchange, promissory-notes, orders, &c. &c." *

But it is not alone when employed in the useful and beneficial purposes of commerce, manufactures, agriculture, and the conduct of exchanges, that capital serves man, by supplanting or performing labour. After the explanation given, without involving the reader in any additional detail, his own imagination will at once suggest how these immense capitals, squandered in the modern conduct of mischievous, but perhaps unavoidable warfare, are alone profitable to the community, upon the same principle.

From this short examination, it appears that capital, whether fixed or circulating, whether embarked in the home or in foreign trade, far from being employed in

^{*} Prospectus d'un Nouveaux Dictionnaire de Commerce, p. 84. For the original see Appendix, No. 111.

putting labour into motion, or in adding to the productive powers of labour, * is, on the contrary, alone useful or profitable to mankind, from the circumstance of its either supplanting the necessity of a portion of labour, that would otherwise be performed by the hand of man, or of its executing a portion of labour, beyond the reach of the powers of man to accomplish; and this is not a mere criticism on words, but a distinction in itself most important.

The idea that capital puts labour into motion, that it adds to the productive powers of labour gives rise to the opinion that labour (which, it will afterwards be shown, is the great means of increasing wealth) is every where proportioned to the quantity of existing capital; † that the general industry of a country is always proportioned to the capital that employs it; ‡ and therefore authorizes the inference, that the in-

^{*} Wealth of Nations, Vol. I. p. 437, 441, 445. 4to editand in many other passages.

[†] Wealth of Nations, Vol. I. p. 3. 4to edit. See also p. 329.

[‡] Ibid. Vol. II. p. 37.

crease of capital is the sovereign and unbounded means of augmenting wealth. Whereas the opinion, that capital can alone be employed with utility and advantage in supplanting or performing labour, naturally suggests the inference, that a country cannot be benefited by the possession of a greater portion of capital than can be employed in performing and supplanting labour, in the production and formation of those things for which there exists a demand.

Neither is this the only important error into which the author of the Wealth of Nations has been led, by considering capital as adding to the productive powers of labour. The impossibility of regarding capital employed in the conduct of circulation; for example, guineas, as adding to the productive powers of the labour of those who take them in exchange, has led him to represent all circulating capital as totally unproductive of profit, and as, in reality, an article of expence

to the community. Though, from what has been said, it must appear certain that there is no mode in which capital can be employed, from which the community, in consequence of the great portion of labour it supplants, derives a greater profit.

Having thus analyzed and explained the nature and origin of the profit on stock, having attempted to make manifest, that as land produces profit by means of its produce, and that as labour produces profit by increasing the quantity, and meliorating the quality of the productions of nature, and by giving it form adapted for consumption, so capital is productive of profit, either by supplanting a portion of labour which would otherwise be performed by the hand of man, or by performing a portion of labour which is beyond the reach of his powers to accomplish; in pursuance of the plan adopted, we should be naturally led to investigate how far the profit of stock, the nature of which has been explained, is to be ranked, along with the produce of land, and the exertions of labour, as a source of wealth.

But the investigation in which we have been engaged seems to preclude the necessity of entering into any detail on this subject; for if we have been successful in showing that labour, in all its varieties, is more or less productive of wealth, it follows, that capital, the profit of which arises from performing, with great advantage to mankind, labour, which has already been proved to contribute towards wealth, must also be regarded as a source of wealth.

CHAP. IV.

OF PARSIMONY, AS A MEANS OF INCREASING WEALTH.

The sources of national wealth having been examined and ascertained, it would seem that we might proceed, without further investigation, to consider the different effects of the produce of land; of the exertions of labour and of capital, supplanting and performing labour, in increasing wealth; these being the sole sources of wealth, and therefore the only means of increasing it. For, as animals are only multiplied by the means by which they are produced; as vegetable substances also can only be increased by the means by which they are produced, as a greater quantity of metals, and other productions from the bowels of the

earth, are to be acquired by no other means, but an increase of that labour which procures them; and as an increased quantity of raw materials can only acquire the form that adapts them for consumption, by a more frequent repetition, or skilful exertion, of the labour that gives them form; so wealth, it might be reasonably inferred, could alone be increased by the means by which it is produced.

But popular prejudice, which has ever regarded the sum-total of individual riches to be synonymous with public wealth, and which has conceived every means of increasing the riches of individuals, to be a means of increasing public wealth, has pointed out parsimony, or accumulation by a man's depriving himself of the objects of desire to which his income entitles him, (the usual means of increasing private fortune,) as the most active means of augmenting public wealth.

When we reflect that this abstinence from expenditure, and consequent accumulation, neither tends to increase the produce of land, to augment the exertions of labour, nor to perform a portion of labour that must otherwise be executed by the hand of man; it seems that we might be entitled at once to pronounce, that accumulation may be a method of transferring wealth from one member of a community to another; but that it cannot be a method of increasing public wealth, because wealth can alone be increased by the same means by which it is produced.

But when the public prejudice is confirmed by men most admired for talents; when we are told by the most esteemed authority, that capital can only be augmented in proportion to what can be saved out of the revenue; * that every prodigal is a public enemy, and every frugal man a public benefactor; † that parsimony and not industry increases capital, (meaning wealth; ‡) and that, as frugality increases, and prodigality diminishes, the public ca-

^{*} Wealth of Nations, Vol. II. p. 37. 4to edit.

⁺ Ibid. Vol. I. p. 414. 4to edit.

¹ Ibid. Vol. 1, p. 421. See also p. 446.

pital, so the conduct of those whose expence just equals their revenue, neither increases nor diminishes it; * it becomes necessary to enter into a more minute examination of this opinion: and the more so, as it has given birth to an erroneous system of legislation, which, if persisted in, must infallibly ruin the country that adopts or perseveres in it.

The means by which stock or capital acquires profithave been already investigated. It has been shown that it is uniformly profitable to man, by supplanting the necessity of a portion of labour, he must otherwise perform, or by performing a portion of labour beyond the reach of his power; and it does not require much consideration to discover what it is that executes this labour;—it is obviously a part of the produce of the earth, or a part of the earth itself, to which either nature or art has

^{*} This opinion concerning the salutary effects of parsimony is held by many other writers on political economy; more particularly by Turgot, in his treatise on the formation and distribution of riches. See from paragraph 49 to 83.

given a form that renders it fit to supplant labour.

If capital, however, in all its variety, is neither more nor less than a part of the produce of the earth, or a part of the earth itself, to which either nature or art has given a form that adapts it for supplanting or performing a portion of labour; let us consider, whether a country can increase its wealth, by appropriating to this duty a portion of its labour, that ought naturally to be employed in the reproduction of consumable commodities, that is, in the formation of revenue.

For the sake of perspicuity, we shall begin by examining the effects of accumulation, in the most simple state of man's existence, where capital has not yet assumed all that variety of form, which man, in the progress of society gives it, for the purpose of performing labour; though the same observations will afterwards appear applicable to societies, such as modern Europe presents to our view; where capital floats in all the variety of channels to

which extended commerce destines it, and where even the natural channels, in which all property would fluctuate, are deranged by overgrown financial arrangements.

When man exists in that state in which he is chiefly occupied in agriculture, or the cultivation of the land, and the wants of his family are supplied, independent of all commercial exchanges, by its own industry, his property can alone consist in the land he possesses, in the grain he annually produces, and the breeding stock, whose produce is reared for consumption; and lastly, in the animals and utensils he employs to enable him to produce and consume his wealth with less labour,—that is, in a more satisfactory and comfortable manner to himself. In such a state, his property, therefore, divides itself into three different branches.

- 1. The land he cultivates.
- 2. The stock he reserves for immediate and remote consumption, under which is comprehended the produce of his farm, whether vegetable or animal.

3. His capital, consisting of the animals or machines he employs to supplant labour in the cultivation of his farm, or in the convenient consumption of its produce.

That this last part of his wealth is very beneficial is undoubted; it supplants a portion of labour, which must otherwise be executed with his hands, and may even execute a portion of labour beyond the reach of his personal exertions to accomplish. If, therefore, he is not possessed of a sufficiency of those animals, instruments, and machines, which form his capital, it will be in the highest degree advantageous that he should augment the exertions of his industry for the purpose of procuring them. But desirable as the augmentation of this description of his property may appear, increase of industry is the only means by which, in this, or any other stateof his existence, he can at once augment his capital and his wealth.

If, indeed, in this insulated state a man could be supposed to be actuated by a disposition to parsimony, he might be induced

to increase his capital, by allotting a portion of the labour he usually bestowed on rearing the quantity of live stock and grain his family were accustomed to consume, to the formation of those things which are useful in supplanting labour. By such a change in the direction of his industry, his capital would be undoubtedly augmented, but it is evident his wealth would not be proportionally increased; for he would necessarily possess a smaller share of that wealth his labour produced, for the enjoyment and consumption of his family, before his disposition to parsimony abstracted a portion of it from this salutary occupation, for the purpose of directing its efforts to the formation of capital.

An arrangement of his labour, which devoted to the production of barley a quantity of labour antecedently bestowed on the cultivation of oats, could never be regarded as increasing his store of barley, and his wealth in similar proportions; it could alone augment his supply of barley at the expence of diminishing his stock of

oats. Additional exertions of industry, directed towards the production of barley, which occasioned no diminution of labour bestowed on the formation of the other objects of his desire, are evidently the sole means of at once proportionally increasing his barley and his wealth. In like manner, additional exertions of industry, that occasion no diminution of the labour usually employed in the production of consumable commodities, must be regarded as the sole means by which a man, so situated, can at once increase his capital and his wealth, in the same proportion.

Further, to explain with accuracy the effects of parsimony, it is necessary to observe, that, when we compare a proposal for increasing the wealth of an individual, by abstracting a portion of the labour he employs in producing one consumable commodity, and devoting it to the production of another; with a proposal for abstracting a portion of the labour he employs in producing consumable commodities, and devoting it to the formation of capital,—

there appears evidently a most important distinction.

If a portion of labour is withdrawn from the production of one consumable commodity, and applied to the formation of another, it cannot be regarded as materially affecting his opulence: it can only be considered as altering the nature of the articles his family consumes and enjoys. The continuance of this arrangement would give stability to the production of these new articles of consumption, but no perseverance in it could increase or diminish his wealth to a greater extent than might be occasioned by the difference in value betwixt the new and the old production.

In the same manner, if his supply of instruments and machines for performing and supplanting labour, (that is, his capital,) is not sufficient, though he might increase his wealth, by abstracting a portion of his industry from the formation of consumable commodities, and applying it to augment his capital, to the extent of the difference, in point of utility, betwixt

the consumable commodities he would lose, and the capital he would acquire; yet this is a practice he could not long continue, without producing a positive diminution of opulence.

Capital is not a commodity that is consumed: it accumulates; and the moment he acquires, from the application of an additional portion of his industry to increase it, all the known means of supplanting labour, by persevering in withdrawing a portion of his labour from the production of consumable commodities, and applying it to the increase of capital, he must inevitably diminish his wealth, to the extent of the quantity of consumable commodities, the production of which is thus impeded.

For, as he cannot desire a greater quantity of capital than can be used in supplanting or performing labour, an additional quantity cannot appear to him an object of desire; and, therefore, cannot be considered as wealth.

Thus, it appears, that parsimony, or the abstracting of a portion of labour from the

production of consumable commodities, for the purpose of applying it to the formation of things useful to perform labour, may, if pushed beyond the bounds of discretion, be the means of materially diminishing the wealth of an individual, who, secluded from society, trusts to his own industry to obtain what his family consumes and enjoys; and that, on the other hand, it can, in no instance, be regarded as a means of increasing, in like proportions, his wealth and his capital.

If such, however, are the consequences of parsimony on the wealth of man, when considered as a solitary individual, it does not appear how it at once can become an unlimited means of increasing wealth, merely from the circumstance of his enjoying the degree of social communication, that implies the existence of exchanges.

It is true, the effects of parsimony on the wealth of a society, even in its simplest form, are not at once so perceptible;—they appear in a shape calculated to deceive:—the fortune acquired by the miser

attracts immediate attention; whilst the loss his conduct creates is diffused over the property of all those members of the society who are employed in producing the articles he would otherwise consume, in shares so minute as almost to escape observation.

A society, however, like an individual, can alone, at once, increase its wealth and its capital, in similar proportions, by additional exertions of industry; for parsimony does not augment opulence; it only changes the direction in which the labour of a community is exerted; and unless we adopt an opinion, which, in economical reasoning, seems long to have been unconsciously cherished,—that capital exclusively forms wealth,—we cannot conceal from ourselves, that, if a society, by parsimony, increases its opulence in capital, it inevitably must diminish its wealth in articles produced for consumption.

Even in the simplest state of social intercourse, by the division of professions, and the infinite number of exchanges that distributions of property, it becomes a matter of intricacy to trace the effects of parsimony: they are nevertheless discernible, and may be exhibited to view in a manner that will make it apparent, that parsimony must have the same effect on the opulence of a community, as it has on that of an individual secluded from society.

To produce a profit, it has been already shown, that all capital must of necessity be employed in supplanting or performing labour; when, therefore, any member of the society, by parsimony, accumulates capital, it must create an immediate demand for the labour of the blacksmith, of the carpenter, and of other mechanics, who are employed in giving to raw materials the form that adapts them for executing labour; the proportion betwixt the demand for, and the quantity of, this sort of labour, must of course be altered in such a manner, as, by increasing its value, to encourage the augmentation of it.

But, as the increase of value and conse-

quent encouragement given to that species of labour, is occasioned by a diminution of expenditure in things that would be immediately consumed, it must reduce their value by the portion of demand it abstracts from them, (as has been already shown,*) in a greater degree than it increases the value of that labour, or of those commodities to the acquisition of which it is perverted; that is, it must produce a greater diminution of encouragement to the providing of food, clothing, and those other articles which would have been consumed. had it not been for this avidity of accumulating capital, than it gives augmentation of encouragement to the forming of those things which tend to supplant labour. But farther, to show the effects of indulging in parsimony,—that baneful passion, which has been falsely denominated a virtue, -it is necessary here to explain the singular effect which the demand it creates must, in society, produce on individual riches, and,

consequently, on the encouragement to the augmentation of wealth.

It has already been made evident, that a sudden demand for any consumable commodity, by increasing its value, encourages an augmented production, and tends, therefore, to increase wealth, though its effect is always counteracted by the more important diminution o !thevalue of other commodities, (from which the sudden rise of the value of any one commodity abstracts a portion of demand,) because the check given to production, by the abstraction of demand, has a more powerful effectin diminishing wealth, than the encouragement arising from an extension of demand has in augmenting it. This was illustrated by showing the effect which doubling the demand for sugar would have, where the means of satisfying that increased demand were to be found, by abstracting a part of the expenditure of the society in butchers meat, wine, and mustard. *

In considering that subject, it appeared, that, though the diminution of individual riches, in the articles of wine, mustard, and butchers-meat, would be great, this would, in some degree, though inadequately, be compensated by an increase in the value of sugar, and the consequent augmentation of the riches of individuals in that article.

But if this abstraction of demand from the articles of butchers-meat, wine, and mustard, had been occasioned by the desire of an individual to indulge in parsimony, then, as the quantity of those articles which compose the capital of the community would be increased, without any alteration in the extent of the demand for them, their value must be diminished, as well as that of the butchers-meat, wine, and mustard, from whence the demand is abstracted. Thus a diminution of value must be produced, not only in the articles for which parsimony occasions an abstraction of demand, but even in the articles for which it creates a demand; and public

wealth must severely feel the effects of the discouragement by this means given to the production of both.

Though it appears, therefore, that the wealth of a society never can be increased by a system of continued parsimony, this abstinence from expenditure in consumable commodities, and consequent accumulation, may evidently be highly injurious to its progress; for a community may suffer, 1st, By the creation of a quantity of capital more than is requisite; 2dly, A community must at all times suffer by the abstraction of a portion of encouragement to future reproduction.

1. By the creation of a quantity of capital more than is requisite; for the moment a thing, however much esteemed, is produced in such a quantity, that the whole cannot be employed,—a part ceases to be an object of desire; and as things, when no longer scarce, can form no part of individual riches, so, when no longer objects of desire, they form neither a portion of individual riches nor of wealth. The finest

palaces in the world stand empty at Delhi, unoccupied and undesired; and the spacious warehouses at Antwerp serve only as monuments of her departed commerce.

2. By the abstraction of a portion of encouragement to future reproduction, a diminution must be occasioned in the wealth to be produced; for, as long as the nature of men remains unchanged, the knowledge of what has been consumed, and of the degree of avidity displayed in the market for the different articles of consumption, must imperiously regulate the nature of what is subsequently produced. This, indeed, may be assumed as a proposition universally admitted; in as much as even those who hold deprivation of expenditure, and consequent accumulation, to be a mode of increasing wealth, anxiously contend that the whole quantity of industry annually employed to bring any commodity to market, suits itself to the effectual demand. * An admission which not only renders it

^{*} Wealth of Nations, Vol. I. p. 70. 4to edit.

impracticable to consider parsimony as a means of increasing wealth, but which precludes the possibility of denying that it must produce a rapid diminution of it.

For, if the abstraction from expenditure of a sum equal to what is added to the capital of the community, causes a diminution of production to that extent; parsimony must be considered as a means of creating capital, at the expence of sacrificing a revenue as great as the capital created; and it does not appear, that a more ruinous operation in all its bearings can be devised, than that of disposing of an annual income, (for example, of a million,) for the purpose of acquiring a capital to the same amount.

If, indeed, the mercantile system of political economy has justly been deemed objectionable, and is now universally exploded, because it exclusively regarded money as wealth, the system that holds parsimony to be the great means of increasing wealth, seems equally objectionable, because it exclusively considers capi-

tal as wealth. The former system could alone be maintained by its followers teaching mankind, in estimating the benefit derived from trade, to overlook, as a matter of indifference, the goods sacrificed to obtain money; whilst the latter can alone be maintained by its adherents habituating mankind to show a similar indifference for revenue, by disregarding that diminution in the production of consumable commodities, which parsimony must inevitably create.

If, however, deprivation of expenditure, and consequent accumulation, far from being the means of increasing the wealth of a solitary individual, inevitably leads to its diminution;—if it appears that social intercourse, though it increases the difficulty of tracing the consequences of parsimony, produces no variation in its effects; it seems impossible to discover what alteration the circumstances of a society can undergo, in the progress of wealth, which will so far change the nature of things as to transform

parsimony into a means of increasing opu-

It has been observed, that the property man possesses, when existing in the situation to which allusion has been made, naturally classes itself under three different heads.

1st, The land he cultivates.

2dly, The stock he reserves for immediate and remote consumption; under which is comprehended the produce of his farm, whether vegetable or animal.

3dly, His capital, consisting of the animals and machines he employs to supplant labour in the cultivation of his farm, or in the convenient consumption of its produce.

In the progress of wealth, the first article of the society's property, the land the farmer cultivates becomes, from improvement, more productive; the improved system of cultivation requires more capital: and the demand thus created, like the demand for consumable commodities, encourages additional exertions of industry, which is the sole method of at once in-

creasing capital and wealth. Indeed, the most beneficial results often flow from the exertions of that labour which is rendered unnecessary by capital employed in executing newly invented means of supplanting labour.—" When I erected my thrashing—" machine, I found myself soon repaid from "the labour performed in cultivating the "farm by those men I was accustomed to "employ in thrashing; and the expence "of making it go by wind instead of horses, "was more than repaid by the additional "work my horses performed, the same "season the improvement was adopted."

These are sentiments familiar to every man conversant in agricultural pursuits; and they are descriptive of the means by which the capital of an individual and the wealth of a society are at once increased, whilst parsimony, which depresses the demand for the produce of land, must discourage its cultivation, and, of course, diminish the demand for capital so employed.

The increased produce of land, occasion-

ed by the wise application of labour and capital, of course, increases, in a great degree, the vegetable and animal substances reserved for immediate or remote consumption, which forms the second branch of the property of a society; and it is this branch of the property of mankind that alone appears capable of unlimited increase; the more man augments it, the more must the human species abound in opulence or in numbers. The affluent member of an opulent society consumes more by reducing his nourishment into a form suitable to his palate, by selecting, to compose his clothing, the parts of the productions of nature most kindly to his feeling, and pleasing to his eye; and by disposing of a part of what is produced in exchange for commodities of a distant country, which affluence enables him, and habit teaches him to enjoy. If, even by all these various methods, the increased produce is not consumed, experience shows that abundance of the necessaries of life has a direct tendency to augment population, and, by this means,

to restore the proportion betwixt the demand for, and the quantity of, the increased commodities; thus maintaining their value, notwithstanding their abundance, and perpetuating the encouragement to reproduction.*

The third class or description of the property of a society, its capital, consisting of all the various means of supplanting labour, and of performing labour, which could not be accomplished by the personal

^{*} To some confused idea of the important truth that this branch of the property of mankind may be increased to an unlimited extent, creating, as it augments, a demand for a further increase of capital, which is here considered as a distinct description of wealth, may be attributed the following remarkable passage in the work of an intelligent author, who wrote on trade, in the end of the 17th century: " This showeth a " mistake of Mr Munn, in his Discourse of Trade, who com-"mends parsimony, frugality, and sumptuary laws, as the " means to make a nation rich, and uses an argument from a " simile, supposing a man to have L. 1000 per annum, and " L. 2000 in a chest, and spends yearly L. 1500 per annum, "he will, in four years time, waste his L. 2000. This is true " of a person, but not of a nation, because his estate is finite, " but the stock of a nation is infinite, and can never be consum-" ed; for what is infinite can neither receive addition by par-" simony, nor suffer diminution by prodigality."-A Discourse of Trade, by H. Bifield, M. D. printed 1690.

exertions of man, may also, in the progress of wealth and knowledge, be wonderfully increased, as the shipping, the navigable canals, the roads, the machines for transporting and for fabricating, and the warehouses for preserving commodities, as well as the capital employed in circulating them, sufficiently denote.*

* Nothing can more forcibly exhibit the great augmentation that has taken place during the last century in the capital, which, in this country, is employed in conducting circulation, in consequence of its increased opulence, than the following advertisement inserted in the Post Boy of the 20th of March 1708, and repeated in the same paper, March 23, 25, and 27:

"London, March 20 .- Whereas there have been several false " and malicious reports industriously spread abroad, reflecting " on Sir Richard Hoare, goldsmith, for occasioning and promot-"ing a run for money on the Bank of England; and in parti-"cular, several of the Directors of the said Bank, reporting. that the said Sir Richard sent to the Bank for ten of their notes " of I.10 each, with a design to send several persons with the " said notes to receive the money therein, so as to effect his ill de-"signs, and to bring disreputation on the Bank, and occasion a "disturbance in the city of London. This is to satisfy all persons, that the Right Honourable the Lord Ashburnham, father of the Honourable Major Ashburnham, major of the first troop of her Majesty's Life Guards, who was ordered to march for 66 Scotland, sending to the said Sir Richard Hoare for a large "quantity of gold, and for ten Bank notes of L. 10 each, for "the said major to take with him to bear his expences; the But public wealth can alone be increased by an augmentation of this or any other description of property, when it proceeds from additional exertions of industry; and capital must at all times have its limits, beyond which, even by these means, it cannot be increased with advantage. In every state of society, a certain quantity of capital, proportioned to the existing state of the knowledge of mankind, may be usefully and profitably employed in supplanting and performing labour in the course of rearing, giving form to, and circulating the

[&]quot; gold was sent to his Lordship accordingly, and Sir Richard's servant went to the Bank for ten notes of L. 10 each, which had intended to promote a run for money on the Bank, he could have done it in a more effectual manner, having by him, all the time that the great demand for money was on the Bank, several thousand pounds in notes payable by the Bank; and also, there was brought to Sir Richard, by several gentlemen, in the time of the run on the Bank, notes payable by the said Bank, amounting to a great many thousands of pounds, which he was desired to take, and receive the money presently from the Bank; which he refused to do till the great demand on the Bank for money was over.

[&]quot;N. B. That the reports against Sir Richard have been more malicious than herein is mentioned, which he forbears to insert for brevity's sake."

raw materials produced. Man's invention. in the means of supplanting labour, may give scope, in the progress of society, for the employment of an increased quantity; but there must be, at all times, a point determined by the existing state of knowledge in the art of supplanting and performing labour with capital, beyond which capital cannot profitably be increased, and beyond which it will not naturally increase; because the quantity, when it exceeds that point, must increase in proportion to the demand for it, and its value, like that of all other commodities, must of consequence diminish in such a manner, as effectually to check its augmentation. It is wonderful how the author of the Wealth of Nations, who successfully ridicules the indefinite accumulation of circulating capital, by comparing it to the amassing of an unlimited number of pots and pans, * did not perceive that the same ridicule is applicable to the unlimited increase of every branch of that

^{*} Wealth of Nations, Vol. II. p. 15. 4to edit-

description of the property of a country, which constitutes its capital.

Fortunately, however, for mankind, the mechanism of society is so arranged, that the mischief done by the parsimony and disposition to accumulation of one individual is almost uniformly counteracted by the prodigality of some other; so that, in practice, nothing is found more nearly commensurate than the expenditure and revenue of every society. This inquiry, therefore, if mankind were left to regulate their conduct by their inclinations, would be rather a matter of curiosity than utility; for, if the effects of parsimony are uniformly counteracted by prodigality, the public wealth can be neither increased nor diminished by it.

As an object of curiosity, it would, at all events, be interesting to investigate, whether parsimony was entitled to all the praises lavished upon it by the learned and the ingenious. But the impression these opinions have, in our own times, made on the conduct of legislation, has given to this inves-

tigation a degree of importance which makes it highly interesting.

Statesmen and legislators, (who, like others, have considered every means of increasing the fortunes of individuals as a means of increasing public wealth,) taught to admire the effect of parsimony and accumulation in the conduct of private fortunes, have been naturally led to regard it as a salutary means of increasing the public fortune, or relieving from embarrassment the public treasury. *

On this principle, the republic of Holland, so early as the year 1655, was induced to set aside an annual revenue, to be

[&]quot;On the same principle that guided the determination of the Parliament of 1786, another act was passed in 1792, which provided, that on all future loans, (in addition to the taxes to be imposed for paying the interest of the same,) a surplus of one pound per cent. per annum, on the capital created, should be raised for the redemption of that capital. This was an idea conceived in that spirit of inflexible integrity and economy, of which nations rarely afford an examinate though, like the same virtue in private life, it is calculated to promote, in the highest degree, their credit and their prosperity." Brief Examination into the Increase of the Revenue, Commerce, &c. of Great Britain, by George Rose, p. 19.

permanently accumulated, for the public benefit. This example was, in the year 1685, followed by Pope Innocent XI.; and an arrangement of a similar nature took place in the management of the Treasury of England in the year 1717, which was afterwards extended in the year 1727, when an annual sum of no less than L. 1,200,000 was devoted to accumulation at compound interest.

All these different sums, however, set aside for accumulation, (or sinking funds as they are called;)—that of the province of Holland in the year 1655,—that of Pope Innocent XI. in the year 1685,—as well as that established in England in the year 1717 and 1727,—arose from savings in consequence of reductions of interest; for mankind had not yet become so enamoured of the idea of accumulation, as to embolden any legislature to impose burdens on the public for the avowed purpose.

How and why this first attempt to force accumulation by law in England died away, will be afterwards considered. In point of

fact, we are told, by one of the ablest and most respectable advocates in favour of this system of increasing the wealth of a nation by accumulation, that, soon after the year 1730, this fund set aside for accumulation, which, if it " could have escaped the hand of " violence, would have made Great Britain "the envy and terror of the world, was pre-"maturely destroyed by the hand of its own "parent;" * and after that period, though there existed the name of a sinking fund, and though sums were from time to time employed to purchase up portions of the public debt, the plan of a regular forced accumulation, by the authority of Government, with a view to public benefit, was, for many years, relinquished in practice. † This system was, however, again revived in the year 1786, when, in the House of Commons, it was stated,—and certainly at the time truly stated,—to be the common consent of all, that L, 1,000,000 should

[•] See an Appeal to the Public on the subject of the National Debt, by Dr Price, p. 37.

[†] Sums paid off by the Sinking Fund established in

be set aside to accumulate for national benefit.

A law was accordingly soon afterwards made, by which L. 1,000,000 was devoted to be accumulated quarterly, till such time as, together with the annuities which were to fall into the public, it amounted to

1717 and 1727, and afterwards augmented, by the reduction of interest, betwixt the year 1750 and the year 1757.

Year.				Year.			
1723,	L. 1,204,786	3	$4\frac{1}{2}$	1738, 1	۵. 1,000,000	0	0
1724,	333,447	18	4	1751,	368,771	2	4
1727,	650,453	2	81	1752,	821,270	13	9
1728,	1,000,000	0	o_	1765,	870,888	5	5 I
1729,	1,275,027	17	101	1766,	870,888	5	$5\frac{1}{2}$
1730,	1,000,000	0	o	1767,	2,616,776	10	11
1731,	1,000,419	16	4	1768,	1,750,000	0	0
1732,	1,000,000	0	0	1769,	875,000	0	0
1733,	913,115	15	$3\frac{1}{2}$	1770,	1,500,000	0	0
1734,	86,884	4	$8\frac{1}{3}$	1772,	1,500,000	0	0
1736,	1,000,000	0	0	1774,	1,000,000	0	0
1737,	1,000,000	0	0	1775,	1,000,000	0	0

Amount of the National Debt at different Periods up to the Year 1775.

Year.		Year.	
1688,	L. 664.263	1748,	L. 78,293,312
1702,	16,394,702	1755,	74,571,840
1715,	54,145,363	1762,	146,682,844
1727,	52,092 235	1775,	135,943,051
1739,	46,954,623		

L. 4,000,000 per annum.* And in the year 1792, after ably stating the prosperity which the duration of peace and tranquillity had secured for this country, the same minister, who proposed the accumulating fund in 1786, introduced a proposal for increasing the sum devoted to accumulation in the following terms:—

"Having stated the increase of revenue, and shown that it has been accompanied by a proportionate increase of the national wealth, commerce, and manufactures, I feel that it is natural to ask, What have been the peculiar circumstances to which these effects are to be ascribed?

"The first, and most obvious answer, which every man's mind will suggest to this question, is, that it arises from the natural industry and energy of the country; but what is it which has enabled that industry and energy to act with such peculiar vigour, and so far beyond the example of former periods? The improve-

^{*} Cap. xxxi. an. 26. Geo. III.

e' ment which has been made in the mode " of carrying on almost every branch of " manufacture, and the degree to which la-" bour has been abridged, by the invention " and application of machinery, have un-"doubtedly had a considerable share in " producing such important effects. We " have besides seen, during these periods, . more than at any former time, the effect " of one circumstance which has principally tended to raise this country to its "mercantile pre-eminence;—I mean that " peculiar degree of credit, which, by a "twofold operation, at once gives addi-"tional facility and extent to the transac-"tions of our merchants at home, and en-" ables them to obtain a proportional supe-"riority in markets abroad. This advan-"tage has been most conspicuous during " the latter part of the period to which I "have referred, and it is constantly in-" creasing, in proportion to the prosperity " which it contributes to create.

"In addition to all this, the exploring and enterprising spirit of our merchants

"has been seen in the extension of our navigation and our fisheries, and the acquisitions of new markets in different parts of the world; and, undoubtedly, those efforts have been not a little assisted by the additional intercourse with France, in consequence of the Commercial Treaty; an intercourse which, though probably checked and abated by the distractions now prevailing in that kingdom, has furnished a great additional incitement to industry and exertion.

"But there is still another cause, even more satisfactory than these, because it is of a still more extensive and permament nature; that constant accumulation of capital;—that continual tendency to increase, the operation of which is universally seen in a greater or less proportion, wherever it is not obstructed by some public calamity, or by some mistaken and mischievous policy; but which must be conspicuous and rapid, indee d, in any country which has once arrived at an advanced state of commercial prosperity.

"Simple and obvious as this principle is, " and felt and observed as it must have "been in a greater or less degree, even " from the earliest periods, I doubt whe-" ther it has ever been fully developed and " sufficiently explained, but in the writings " of an author of our own times, now un-4 fortunately no more, (I mean the author " of the celebrated Treatise on the Wealth " of Nations,) whose extensive knowledge " of detail, and depth of philosophical re-" search, will, I believe, furnish the best " solution to every question connected with "the history of commerce, or with the " system of political economy. This accu-" mulation of capital arises from the conti-" nual application of a part, at least, of the " profit obtained in each year, to increase "the total amount of capital to be employ-"ed in a similar manner, and with con-"tinued profit, in the year following. The " great mass of the property of the nation " is thus constantly increasing at com-"pound interest; the progress of which, " in any considerable period, is what,

"at first view, would appear incredible. "Great as have been the effects of this "cause already, they must be greater in "future; for its powers are augmented "in proportion as they are exerted. It "acts with a velocity continually acce- "lerated, with a force continually increas- "ed.

" Mobilitate viget, viresque acquirit eundo." *

This was the prelude to a legislative arrangement, which devoted the annual million to be accumulated till it produced L. 3,000,000 per annum over and above the yearly million, and the produce of the annuities which would fall into the public; and also to a provision, compelling one per cent. to be set aside annually for accumulation on the capital of all debt which should in future be contracted.

L. 400,000 additional was likewise given

^{*} See Mr Pitt's Speech, printed by authority for G. G. and J. Robinsons, 1792, p. 36.

to the accumulating fund this year, which laid the foundation of another annual grant of L. 200,000.

But the effects of this admiration of the benefits derived from a system of accumulation did not terminate here. The same minister, in the year 1799, imposed an income tax, which he calculated would produce L. 10,000,000 annually;* and an act was passed, appropriating the produce of this tax on the return of peace to accumulation till it should amount to a sum sufficient to redeem the debt subsequently to be contracted during the war.

The accumulating fund created in the year 1786, together with the addition derived from the arrangement made in the year 1792, by this time amounted annually to a sum such as enabled the public to foresee, that, before the probable return of

^{*} See Appendix, No. IV. being the Computation of Income by Mr Pitt, as stated by Lord Auckland, in his Speech, printed by authority, 1799. And also by Mr Rose, Appendix, No. 7. of his Brief Examination.

peace, it would produce L. 5,000,000 annually.

Under the law of this country, therefore, as it was then constituted, had this income tax produced L. 10,000,000, L. 15,000,000 of the revenue of the country would, on the return of peace, have been devoted to accumulation.

This statement will not, in substance, be contradicted either by Mr Pitt * or his admirers. † He took credit to himself for

* See Resolution on the State of Finance, 19th and 20th, proposed by Mr Pitt, and agreed to by the House of Commons, 1801.

† "But the farther resulting advantages are infinitely "more important. It is not amongst the least of those ad"vantages, that, by the present plan, the salutary effects of the
"sinking fund are greatly accelerated. The sums of different
descriptions to be reserved and applied by the commission
ers for the redemption of the national debt, will, in the first
year of peace, be not less than fifteen millions, or nearly
£.50,000 a day, for three hundred days in the year. The
purchase stock, which is to be extinguished, and not to re
turn to, cannot fail to have an effect in favour of our public credit, as much beyond all calculation as it will be beyond all experience." See the Substance of Lord Auckland's Speech, printed by authority, p. 22.

the device: and they uniformly asserted, that the merits of the plan, which they stated to be of more importance to Great Britain than the possession of all the mines of America, would hand down his name with glory to posterity. *—This, too, was

* See Chalmers's Estimate of the Comparative Strength of Great Britain, page 183. To which, however, it is impossible to refer without remarking, that it appears extraordinary the author should conclude, with the following paragraph, the same chapter in which he states the Sinking Fund, as constituted by Mr Pitt, to be a measure of more importance to Great Britain than the acquisition of the American mines:—

"The alterations which have been made in the collections of some departments of the public income, and the improvement which has happily been effected in all, have brought, and continue to bring, vast sums into the exchequer. The public expenditure continually distributes this vast revenue among the creditors, or servants of the state, who return it to the original contributors, either for the necessaries or luxuries of life. The exchequer, which thus constantly receives and disperses this immense income, has been aptly compared to the human heart, that unceasingly carries on the vital circulation; so invigorating while it flows; so fatal when it stops. Thus it is that modern taxes, which are never hoarded but always expended, may even promote the employments and industry, the prosperity and populousness, of an industrious people."

the object of those daring projectors of the Tower of Babel, who are recorded in sacred history to have said, "Go to, "let us build us a tower whose top may "reach unto heaven, and let us make us a "name." And striking as the similarity may be in the object, there will be found a still more glaring resemblance in the design.

Had an opportunity existed, in profound peace, of applying this sum of L.15,000,000 but for two years, to the uses to which by law it was appropriated, the ruin it must have produced would have practically exhibited and explained the folly of the attempt. But as we have had no opportunity of learning from experience the consequences of the measure, it will require a little investigation to display them.

Before, however, proceeding to this inquiry, lest the reader should be disposed to think, with the generality of mankind, that what is true in figures, and the result of accurate calculation, must be true in practice, and possible in execution; he is desired to reflect, that one penny put out, at our Saviour's birth, at 5 per cent. compound interest, would, before this time, have increased to a greater sum than could be contained in five hundred millions of earths, all of solid gold; and that this is a calculation as accurate, and as true, as any with which Parliament has been furnished in the progress of this delusion. *

If L. 15,000,000 a-year were levied by

* "One penny put out at our Saviour's birth, to 5 per "cent. compound interest, would, in the present year, 1781, have increased to a greater sum than would be contained in two hundred millions of earths, all solid gold. But if put out to simple interest, it would, in the same time, have amounted to no more than 7s. 6d. All Governments that alienate funds destined for reimbursements, choose to improve money in the last rather than in the first of these ways." Observations on Reversionary Payments, &c. by Richard Price, D. D. p. 228.

That the reader may see a lively picture of the absurd length to which the speculations of increasing the wealth of mankind, by accumulation of capital, have been carried, we have, in Appendix, No. V. printed the testament of Mr Fortune Ricard, teacher of arithmetic at D——, read and published at the Court of Bailiwick of that town, the 19th August 1794, translated by Dr Price.

the Government from the revenue of its subjects, to defray the charge of warfare or any other extraordinary expenditure; as this money would be expended in articles of consumption, as fast as assumed, the expence of the Government would effectually counteract the effects of the parsimony it renders necessary, and creates in the subject. The only mischief, therefore, that could ensue, would arise from the extensive demand it must suddenly occasion for one class of commodities, and from the consequent abstraction of so large a portion of the revenue of the subjects from the acquisition of those articles in which it is usually expended;—a mischief in itself nowise trifling, as recent experience has taught the merchants of this country. *

Very different, however, must have been the effect of raising fifteen millions for the purpose of accumulation, or of forcibly converting fifteen millions of revenue into capital. In this, as in the former case, there would have ensued all the mischief

occasioned by abstracting a portion of demand represented by fifteen millions ayear, from the commodities which the subjects were accustomed to acquire with this part of their revenue; but, in this case, there would unfortunately have existed no extraordinary expenditure, to counteract the full effects of this forced parsimony; for it would have been difficult to persuade the proprietors of stock, from whom such extensive purchases would have been made by the Commissioners of the Sinking Fund, all at once to spend, as revenue, that which habit had taught them to regard as capital; or, in other words, all at once to ruin themselves, in order to counteract the bad effects of this miserly policy in Government.

Unless, however, the stockholder could have been persuaded thus to squander his capital, fifteen millions a-year less must have been expended in the different articles of consumption the country produced or manufactured; that is, a portion of demand would at once have been with-

drawn from consumable commodities of British growth or manufacture, or, what is the same thing, from consumable commodities purchased by things of British growth and manufacture, nearly equal to the whole demand created by the foreign trade of the country in the year 1786, when the million was first set aside to accumulate, as the exports from England amounted in that year to the sum of L. 15,385,987.

But if is true, (which all writers on political economy, however much they may differ on other subjects, concur in asserting, *) that the whole quantity of industry

^{* &}quot;Que la totalité des sommes du revenu rentre dans la "circulation annuelle, et la parcoure dans toute son étendue; "qu'il ne se forme point de tortunes pécuniares, ou du moins "qu'il y ait compensation entre celles qui se forment et celles qui reviennent dans la circulation; car autrement ces fortunes "pécuniaires arrêteroient la distribution d'une partie du revenu annuel de la nation, et retiendroient le pécule du Royaume au préjudice dé la rentrée des avances de la culture, de la retribution du salaire des artisans, et de la consommation que doivent faire les differentes classes d'hommes qui exercent des professions lucratives: Cette interception du pécule diminueroit la reproduction des revenus."—" It is necule cessary that the sum-total of the revenue should enter into the annual circulation, and pervade it in its utmost exurent; that no pecuniary fortunes be formed, or, at least, that

employed to bring any commodity to the market, naturally suits itself to the effectual demand, and constantly aims at bringing the precise quantity thither that is sufficient to supply the demand; it follows, that this diminution of demand must occasion a similar diminution of the productions of the country.

"there be a compensation between those that are formed and those which, from extravagance, return into the circulation; for, otherwise, the amassing of pecuniary fortunes would impede the distribution of a part of the annual reverue of the nation, and hold back part of the circulation of the nation, to the prejudice of the advances necessary for the conduct of agriculture, of the recompence of the salary of the artisans, and of the consumption incident to the different classes of men who exercise lucrative professions: and this reduction would inevitably diminish the revenue reproduced." Maximes Générales du Gouvernement Economique, par Quesnay.

"Le revenu est donc le canevas de la dépense proprement dite. Il importe que le revenu soit dépense, car toute fargne sur le revenu est diminution de dépense, et par une suite directe de production et de revenu."—"The revenue, then, properly speaking, is the groundwork of the expence; it is necessary that the revenue should be expended; for very saving in the revenue occasions a diminution of expenditure, and, by direct consequence, of production and of future revenue." Philosophie Rurale, ou Economie Générale et Politique de l'Agriculture, p. 48. See also Wealth of Nations, Vol. I. p. 70, and Vol. II. p. 9, 4to edit.

Though the opinions of great and eminent men are here referred to for establishing the position, that a diminution of demand must occasion a diminution of produce, that is, of wealth; it is not on authority alone that this inference rests. The reasons why it must happen have been stated, and the progress that a diminution of demand would probably make, in curtailing the production of commodities, was traced out in the case of a supposed diminution of demand for butchers-meat, wine, and mustard;* and the same reason is applicable to every article of the produce of any country for which there exists a failure of demand.

But if this effect necessarily attends a diminution of demand, which not only reason, but the authority of all eminent men, concurs in saying must ensue; an abstraction of demand, to the extent of fifteen millions, must have occasioned a similar deficiency of annual production. It follows, therefore, that three hundred millions (calculating the value of the fifteen

^{*} See p. 82.

millions of produce which must have been annihilated at twenty years purchase) of real wealth would have been extinguished, before this accumulating fund, with all its boasted activity, could, in all probability, have converted one hundred millions of the revenue into capital.

In truth, the effects of this diminution of demand, to the extent of fifteen millions, would have been much more formidable than what is here represented; because it has already been established, that the diminution in value of every commodity, occasioned by a failure of demand, must be always much greater than the value of the demand abstracted.*

Dismal as the consequences of this experiment must have been in diminishing the reproduction and revenue, there appear, on the other hand, no good effects likely to have resulted from it in relation to the capital of the country, to counteract its evil effects on the revenue.

^{*} See p. 88.

The stockholders, who would have been tempted to sell by the offer of the Commissioners of this Sinking Fund, would, it is evident, have had in their possession fifteen millions of capital, upon the employment of which, in such a manner as to return a profit, their income, that is, their subsistence, must have depended. To acquire a profit, we know that capital must be employed to supplant or perform a portion of labour, in producing or adapting commodities for consumption, and it is hardly possible to suppose, that there could have existed any new channels of so employing capital, at a moment when there was forcibly created a diminution of demand for commodities, to the extent of fifteen millions.

So far from its being reasonable to suppose there could have existed, under such circumstances, any opportunity of employing an additional quantity of capital, it is certain, that so great a diminution of demand must have thrown out of employ some of that capital which was useful in

supplanting labour, in the progress of bringing to market those commodities, for which there could no longer have subsisted a demand.

The only means, therefore, those stockholders could have had of forcing the capital in their hands into employment, must have been by offering to supplant labour, at a cheaper rate than that at which it was antecedently performed. A competition would thus have arisen; the profit of capital must have been diminished; the interest paid for stock or money must have fallen, and of course the value of fixed annuities, or Government securities, must have risen; and this must have continued progressively, till capital became so abundant, and its profits so diminished, that the proprietors would have been induced to remove it to other countries, where higher profits might be made; and France would inevitably have been amply supplied with capital, the want of which is the great drawback on her industry.

Neither is it theory alone which points

out these evils, as the necessary result of such a measure; for, as far as practice gives us an opportunity of judging, the accuracy of the inference is uniformly confirmed by experience. When Pope Innocent XI. reduced the interest of his debt from 4 to 3 per cent., and employed the sum saved to accumulate, but a short time elapsed till the new 3 per cent. fund sold at one hundred and twelve. In like manner, when the interest of the national debt of England was reduced, in 1717, from 6 to 5 per cent., and the saving devoted to accumulation; the consequence was, that in 1727, from the rise of public securities, there was an opportunity of again reducing the interest from 4 to 3 per cent., and of applying an additional sum to accumulate. This, of course, produced another rise, and to such a degree, that, in the year 1733, we learn from authority, that "the sinking fund was " now grown to a great maturity, and pro-"duced annually about L. 1,200,000; and " was become almost a terror to all the in-"dividual proprietors of the public debt,

"The high state of credit, the low rate of

"interest of money, and the advanced price
of all public stocks and funds above par,
made the great monied companies, and
all their proprietors, apprehend nothing
more than being obliged to receive their
principal too fast; and it became almost
the universal consent of mankind, that a
million a-year was as much as the creditors
of the public could bear to receive in dis-

" charge of part of their principal." *

Nothing can more forcibly illustrate the truth of the opinions which have been stated, than what Sir Robert Walpole here affirms. If he had been aware of the nature and the foundation of the profit of stock; if he had perceived the effects of forced parsimony, not only in depreciating those commodities from which it abstracts a portion of demand, but even in depreciating that for which it creates a demand; if he had written on purpose to support and

^{*} Considerations concerning the Public Funds, the Public Revenues, and the Annual Supplies, by Sir Robert Walpole, p. 56.

illustrate the theory here built upon, he could not have done it with more effect than by stating, "that a million a-year be"came as much as the creditors of the "public could bear to receive."

It is remarkable, too, that this is almost the only fact in the whole pamphlet, to the truth of which his adversary, in his reply, seems to subscribe. * And, indeed, Mr Hume, nearly twenty years afterwards, plainly shows, that he was aware of that circumstance, by stating, that, " in times " of peace and security, when alone it is " possible to pay debt, the monied interest " are averse to receive partial payments,

^{* &}quot;You tell us, that the public creditors were so far from "making any provision for themselves, either in their separate or their corporate capacity, that the sinking fund should be applied to the discharge of their principal, that, whenever it hath been applied to this purpose, the only contest between them hath been, who should not be paid.

[&]quot;In another place you tell us, That the South Sea Com"pany were so far from looking upon their being first paid
"off, as a privilege or beneficial preference, that they ex"pressly provided against it: This, again, is very true, nor
"have we denied it." The Case of the Sinking Fund, being a full Reply to a late Pamphlet, entitled, Some Considerations, &c. p. 27.

"which they know not how to dispose of to advantage." *

In the Estimate of the Comparative Strength of Great Britain, † Mr Chalmers also states, on the authority of Sir John Barnard, that the effects of the sinking fund were such in the year 1738, that "the great contest among the public cre- ditors, at that fortunate epoch, was not so much who should be paid his capital, as who should be suffered to remain the creditors of the state;"—yet, during the preceding ten years, the sinking fund had effected a diminution of little more than four millions of debt. ‡

Further, the doctrine here maintained derives strong and ample confirmation from the progressive effect which the following

Intermediate Diminution,

See a note to the first edition of Mr Hume's Discourse on Public Credit, which is suppressed in the later editions.

[†] Chalmers's Estimate, p. 114.

[†] Principal of the National Debt, 1728, L. 51,028,431 Ditto 1738, 46,661,767

L. 4,366,664

statement shows the sinking fund to have had on the price of public securities during the last peace.

STATEMENT, showing the Prices at which 3 per cent. Stock was bought by the Sinking Fund, in every Quarter, from the beginning of the Year 1787 to the end of the Year 1792.

1787.					1788.			1789.		
Qr.		0,,		Pr.	Qr.	-, 0	Pr.	Qr.	., 0,	Pr.
2.	ending	Jan.	31.		6.	-	76	10.	-	73 }
3.	•			76	7.	•	75¥	3		74
4.	•	July	31.	$74\frac{1}{2}$	S.	-	741	12.		76 ¹
5.		Oct.	31.	$71\frac{1}{2}$	9.	-	743	13.	•	80 <u>1</u>
1790.					1791.		1792.			
Qr.				Pr.	Qr.	., .	Pr.	Qr.	., .,	Pr.
14.	ending	Jan.	31.	78	18.	_		22.		883
15.	-	Apr.			19.	-	$79\frac{1}{4}$	23.	•	$96\frac{1}{4}$
16.	-			$73\frac{1}{4}$	20.	-	$81\frac{1}{2}$	24.	-	$90\frac{1}{2}$
17.	-	Oct	31.	763	21.	-	881	25.	•	$90\frac{1}{4}$

The gradual rise this statement exhibits, though occasionally interrupted by some accidental occurrences, that have, for the moment, retarded or accelerated its progress, clearly marks the operation of a regular, steady, and uniformly progressive influence, such as the accumulating fund must inevitably have produced. Yet during these six years, one would have imagined, that so many opportunies must have

occurred of employing capital in new channels, that the accumulating fund being absorbed in new adventures, could not have diminished the value, that is, the interest of capital; for the number of inclosure bills, of road and canal bills, never was so great in so short a time, * whilst the increase of our exports, † of the ton-

* Table, showing the Number of Acts of Parliament for Roads, Bridges, &c. which passed in each of the following Years:

	1785	1786	1787	1788	i 789	1790	1791	1792	l'otat.
Roads and brid- ges, Canals, harbours.	31	40	30	37	36	30	44	54	302
&c. Inclosures, drain-	7	4.	3	5	6	9	13	17	64
ing, &c. Paving, and other	22	25	19	36	36	27	39	41	245
parochial improvements,		14	14	14	18	20	20	19	139
The total,	80	83	66	92	96	86	116	131	750

[†] Amount of the Exports from Great Britain in the following years:

Year.	L.	Year. 1789, - 20 1790, - 20	L.	Year.	L.
1786, - 16	300,725	1789, . 20	,013.297	1791, - 2	2,731,994
1787, - 18	3,296,166	1790, - 20	,120,120	1792, - 2	4,905,400
1788 18	3,124,082				,

nage of our shipping, * as well as the extension of machinery in every branch of manufacture, was equally remarkable; and it is certain, that the increase of produce and manufactures must have required an additional capital to circulate them.

Experience, however, shows us, that this was not the case. Stocks rose from 74 to 96; that is, the interest or value of capital sunk from four pounds one shilling and one penny, to three pounds two shillings and sixpence per annum; yet there was then only L. 1,000,000 a-year set aside for accumulation, and the whole sum accumulated during the five years amounted to L. 5,424,592; * that is, to little more than a third of that which the temerity of

^{*} Account of the Tonnage of British Shipping cleared outwards in the following years:

Year. Tons. Year. Tons. Year. Tons. 1786, - 982,132 1789, - 1,343,800 1791, - 1,333,106 1787, - 1,104,711 1790, - 1,260,828 1792, - 1,396,003 1788, - 1,243,206

⁺ Report of the Select Committee, relating to the Public Income and Expenditure, 1791; Appendix, X. No. 1. With this sum, purchases were made of 3 per cent., and to the amount of L. 6,772,350.

Mr Pitt projected, on the first year of the return of peace, to abstract from expenditure in the acquisition of commodities the produce and growth of the country, and to convert into capital.

In the receipt of the income-tax, Mr Pitt, however, was disappointed; it never much exceeded five millions and a half. *But if he had remained Minister, and we had enjoyed peace, a sum to this amount would, till the year 1811, have been applicable to accumulation, over and above the sum of L. 5,585,572, † applicable to that purpose at the time peace was restored; that is, a sum of upwards of L. 11,000,000 would have been annually withdrawn from expenditure on commodities, the produce and manufacture of the country, and applied by law to accumulation;—a system which never could have

^{*} The receipt of the income-tax for one year ending 5th April 1801, amounted to L. 5,741,150.—See Resolutions voted by the House of Commons.

[†] See No. 13. Accounts presented to the House of Commons, respecting the public funded debt, and the reduction thereof, 1802.

been carried into execution, without effecting the ruin of the country, both by the diminution it must have occasioned of its produce and manufactures, and by the means it must have afforded of aggrandizing our rivals on the continent, by furnishing them with capital.

The income tax has now been repealed, and the sinking fund is new-modelled by the 42d Geo. III. cap. 71. By this law, the Sinking Fund established in 1786, and that of the year 1792, the old and new Sinking Funds, as they are called, are consolidated; the provisions concerning the old sinking fund, as to the application of the interest after it amounted to three millions, are done away; the annuities, as they expired, are directed to be no longer carried to the account of the commissioners; the one per cent. was dispensed with, on the loans of 1798, 1799, 1800, and 1802, amounting in all to the sum of L. 86,796,375, whilst provision was made for the practice being continued on all future loans; the L. 200,000 annually granted is made a permanent grant; and the produce of both the new and the old fund is made applicable to accumulate at compound interest, till the debt, amounting, at the time of passing the act, to L. 48,987,656, * is extinguished.

Even now, then, on the return of peace, as the law stands, there will be an accumulating fund of more than six millions per annum. † Six millions must, therefore, be withdrawn from the acquisition of commodities, the growth and manufacture of the country, and forcibly converted into capital; a situation which will require much attention from those who have the management of the country at the time. It is an experiment hitherto untried. The accumulating fund has risen to this magnitude during warfare; and the effects of accumulation, during war, are more than coun-

^{*} See No. 13. Accounts presented to the House of Commons, respecting the public funded debt, &c. 1802.

⁺ The sum to be expended in the present quarter, by the Commissioners of the Sinking Fund, is L. 1,668,161, 12s. 1d.

teracted by the extraordinary expenditure it occasions. The accumulating fund now provided by law, is nearly six times greater than any of which we have had experience during peace. Indeed, it amounts, in one year, to a sum almost equal to all that was accumulated betwixt the year 1717 and and the year 1732; * which reduced the value of capital from 6 to 8 per cent.; for, in this last year, 3 per cents. were at one hundred and one. It is larger, too, than the sum-total of what was accumulated during the last peace, † and the 3 per cents. were then gradually raised from sixty to nearly one hundred; that is, the value of capital was reduced from 5 to 3 per cent.

Under all these circumstances, those who

^{*} The sum-total applied for this purpose, during that period, amounted to L. 6,464,132. See Sinclair's History of Public Revenue, Part II. p. 122.

[†] The sum issued to the Commissioners of the Sinking Fund betwixt the 1st of August 1786, and the 1st of August 1791, amounted to L. 5,424,592. Report of the Committee of the House of Commons on the Public Expenditure, 1791, App. X. No. I.

have the management of the Public Treasury on the return of peace, must be careful, on the one hand, lest, from the abstraction of demand to the amount of six millions, the price of commodities be reduced to such a degree as to discourage reproduction; they must be cautious not to mistake, for the effects of abundance, that which in reality may be only the effect of failure of demand. On the other hand, they must be scrupulously attentive to the effects of this forced increase of capital; for, if 3 per cents. should by this means be quickly raised to par, or, in other words, if the value of capital should be reduced from upwards of 5 per cent. to 3, and the same causes continue to operate its farther reduction, in the present situation of Europe it will inevitably furnish other nations with what will render them most formidable.

That both these consequences must ensue is undoubted, and that, too, with a degree of unexpected rapidity. Of the abstraction of demand to the amount of six millions a-year, from goods the growth and

produce of the country, we have no experience; neither have we experience of the effects of forcibly adding six millions annually to the capital of the nation; but since there existed an accumulating fund in this country, six millions have never been accumulated by the public even in a course of years, without creating such abundance of capital in proportion to the demand for it, as to reduce its value to 3 per cent. per annum.

That the present situation of the country is different from what it was at any former period, is most certain. That it may, therefore, be able to sustain a larger accumulation than formerly, is possible; but accumulation of capital must, at all times, have its bounds, beyond which, if it is enforced, the consequences which have been stated must inevitably be produced.

We already know, that the value of capital may be reduced from 6 to 3 per cent. by forced accumulation; and it is impossible to say how low it may be brought by the continued progress of accumulation,

which increases the quantity of capital; whilst, far from increasing, (by the effect it has of abstracting revenue from expenditure in consumable commodities, and consequently of abridging consumption,) it inevitably diminishes the demand for it.

If, indeed, the whole of the capital which must by this means be created, could possibly be kept within the country, it is demonstrable that, before any considerable progress could be made in this system of accumulation, the value of capital must be reduced to a trifle.

Nothing but a confusion of ideas concerning the nature of the profit of capital could give birth to the fancy, or induce any one to cherish the opinion, that capital might be increased to an unlimited degree; for the moment the profit of capital is regarded as arising from its supplanting or performing labour, it is at once evident, that, as the means of consuming must, at all times, limit the quantity of labour that can be employed in preparing things for consumption, so it must limit the amount

of capital that can be used in co-operating with the hands of man, for the purpose of performing labour; and that, in proportion as forced parsimony abstracts from the funds that would be allotted to acquire consumable commodities, the demand for labour, whether performed by the hand of man, or by capital, must be diminished.

To what degree capital might be augmented, if produced universally over the world by the increased industry of man, directed to the production and formation of those things every way useful to supplant and perform labour, (the sole method in which the capital of a country and its wealth can at once be increased,) with benefit to mankind, is a question we are not here called upon to agitate.

What is affirmed, and what we have attempted to establish by argument, is, 1st, That the old maxim, "a penny saved is a "penny gained," is not applicable to public wealth; 2d, That a nation, in the circumstances and situation of the British empire, cannot, with impunity, either forcibly

abstract a sum so large as has been proposed, from expenditure in consumable goods of its produce and manufacture, or forcibly accumulate capital with such rapidity.

For no nation, without injury to the progress of its wealth, can thus rapidly increase its capital, at the expence of abstracting annually so large a sum from expenditure in consumable commodities; and, in the present situation of Europe, if this country could, by parsimony, render capital so abundant, as it is impossible to prevent the removal of it, it would be relatively injurious to our interest; for the situation of other nations, and those, too, whose interests, at present, we would least wish to promote, is such, that they would derive more benefit from it than would result to the British Empire.

In truth, though Parliament has formally announced, by an act of the legislature,* the extinction of the national debt in for-

^{*} See Appendix, No. VI. containing extracts of cap. 71, 42d Geo. III.

ty-five years; or, in other words, the design of abstracting from expenditure in consumable commodities, and forcibly converting into capital, within that period, a sum amounting nearly to five hundred millions; that is, to more than six times what has been esteemed the amount of the whole capital now employed in the conduct of our foreign trade; *-that act, sooner or later, must be reconsidered; for the impossibility of accumulating a penny till it amounts to the value of five hundred millions of earths of solid gold, is not more apparent, than the impossibility, without the ruin of the country, of abstracting from expenditure, in its goods and manufactures, a revenue so large as L. 5,585,572, and that, too, annually increasing at compound interest for forty-five years. †

^{*} See Mr Pitt's Computation, Appendix, No. IV.

[†] See Appendix, No. VII. where a statement is given of the sum that, under this system, if pursued, must every half year be abstracted from expenditure in goods the produce and manufacture of the country, and forcibly converted into capital during the forty-five years, which, before the expiration of that term, will be found to amount to upwards of L. 20,000,000 per annum.

Nothing, indeed, can be more absurd, than the golden dreams with which Parliament and the nation have been amused through the medium of the calculations that have been formed on this subject.* Perhaps it may with reason be thought, that nothing could be more unfortunate than the faith that seems to be reposed in them.

For though the sinking fund, the offspring of this delusion, never can, without
ruining the country, be accumulated to an
amount equal to the debt of the nation,
yet its existence has greatly facilitated the
contracting of debt; that is, it has enabled
those who had the management of the
government more completely to derange
the natural and most advantageous distribution of the property of the country;
—that distribution, which, giving to the
possessor the greatest real interest in the

^{*} See Appendix, No. VIII. containing a statement presented to the House of Commons, 7th April 1802, of the amount of stock which will be purchased in forty-five and forty-six years, at the several rates of interest, 3, $3\frac{1}{4}$, $3\frac{1}{2}$, $3\frac{3}{4}$, and 4 per cent. by a sinking fund of L. 5,585,572 per annum.

property he has to manage, affords the greatest encouragement to those exertions of industry in the conduct of it, which alike benefit the proprietor and the public.

The extreme importance of the subject alone appears a sufficient apology for having gone so much at length into the consideration of the legislative provisions for paying off the national debt. But, indeed, it was necessary, in giving an idea of the origin and progress of wealth, to show that it can alone be increased by the means by which it is produced; and this could not be effected without investigating the consequences of parsimony, (which has been hitherto considered as the most active means of increasing wealth,) and without fully explaining why parsimony, whether private or public, whether the effect of the depraved taste of individuals, or of an erroneous system of legislation, far from being the means of increasing, must, if pushed beyond a certain extent, prove fatal to the progress of public wealth. *

^{*} Since the publication of the first edition, the arrangement

Having now endeavoured to do away the impression which prejudice has created on this subject, we are at liberty to proceed to the consideration of how far, and in what manner and proportions, the produce of land and of labour, whether performed by the hand of man or by capital, contributes to the increase of national wealth; for as these constitute the sole sources of public wealth, so they must form the sole means of increasing it.

of the sinking fund has been, on two different occasions, interfered with, but the same principle has, throughout, been persevered in; and, as the subject is here introduced, not for the purpose of giving a history of that establishment, but to illustrate the mistake that writers on political economy have fallen into, in considering parsimony to be a source of public wealth, it is therefore unnecessary to enter into minute details of the plans that have been adopted; more particularly as the effects of this accumulating fund have hitherto been uniformly counteracted, even since the peace, by the money go. vernment has been under the necessity of borrowing, to defray the national expenditure, as will distinctly appear from the account contained in the Appendix, No. IX. which shows the amount of debt contracted, and the amount of debt redeemed, in each year, from the 1st of February 1786, when the sinking fund was established, to the 1st of January 1818; and also, the total amount of unredeemed debt in each of these years.

CHAP. V.

OF THE MEANS OF AUGMENTING WEALTH,
AND THE CAUSES THAT REGULATE ITS INCREASE.

Though land, labour, and capital, have been considered as forming the sources of the wealth of mankind, and though we have endeavoured to establish the opinion, that wealth can alone be increased by the means by which it is produced, it does not from thence follow, that land, labour, and capital, should each of them afford means of increasing wealth; far less that they should, in different stages of society, contribute towards its increase, in any thing like similar proportions.

It has already been observed, that, in the early state of hisexistence, man must have derived a greater proportion of his wealth from land than at any subsequent stage of society. To the produce of the earth, which nature presented to his view, he must, at first, have had recourse for the satisfaction of all his appetites and desires.

His bodily labour, in this state of society, must, in its object, have been similar to that of the other animals, calculated to appropriate and prepare for consumption those things which nature afforded; and, under such circumstances, the share of his labour must have been small, indeed, which could either be supplanted or performed by capital. The club with which he destroys his prey; the wooden knife with which he prepares it for consumption; the hook with which he draws towards him, and appropriates the fruit of trees; the hatchet of stone with which he obtains and fashions those his rude instruments, form nearly the whole capital that the history of savage nations displays to our view.

Thus circumstanced, like the rest of the animal creation, on nature he depends alone for the means of continuing his existence.

The fertility of some seasons bestows an ample, the sterility of others affords only a scanty supply; and man seems little to surpass other animals, either in dexterity in securing the objects his appetites suggest as desirable, or in ingenuity in preserving and adapting them for consumption.

Even in this state, however, as an animal cannot be captured and appropriated, or a quantity of fruit collected and conveyed home without labour, his wealth cannot be considered as exclusively proceeding from land, though this is obviously the great and principal source from whence he acquires it.

But the moment man appears in the state of a shepherd, or an husbandman, we perceive his labour, whether performed by his hands or capital, taking a new direction, and acting in a sphere peculiar to the human species.

It is no longer employed, like that of the other animals, in securing or fashioning the scanty supply which nature affords; but points itself to the more important object,

of increasing the quantity, and meliorating the quality, of those productions of nature that are most desirable to him.

The spontaneous produce of the earth, at first the chief source of his wealth, nowise contributes to the increase of it; for it is to his personal labour, and that performed by the capital he creates, to which he owes the augmented production of those things, the first supply of which he derived from nature.

The increase of the wealth of mankind may, therefore, be properly considered as arising from labour, whether personal or performed by capital, directed towards the increase of the quantity, and melioration of the quality, of the productions of nature; and from that description of labour, whether performed by his hands or by capital, from which, in a certain degree, he, in common with other animals, derived the objects of his desire from his earliest existence; to wit, from labour, directed towards appropriating and adapting to consumption what forms his wealth.

It must be observed, too, that this last source of the increase of the wealth of mankind is, in the progress of society, in some degree narrowed, as the productions of the ocean are almost the sole objects of desire, that, in an advanced stage of society, remain unappropriated.

In civilized society, therefore, with the exception of what he derives from the ocean, the wealth of man can alone be increased:—

- 1. By labour, whether personal or performed by capital, employed in increasing the quantity, and meliorating the quality, of the objects of his desire; that is, by agriculture.
- 2. By labour, whether personal or performed by capital, employed in giving form to, and adapting commodities for, consumption; that is, by manufacturing industry.

Though we have already vindicated manufacturing industry from the attempts of some philosophers, to prove that it is totally unproductive of wealth, it in truth, however, acts a very subordinate part in the

formation of the increased wealth of every society, unshackled by legal restrictions or forced distributions of property.

It is evident, that the wealth arising from giving form to, and adapting commodities for, consumption, must depend upon the production of a sufficient quantity of raw materials to be fashioned, as well as upon the existence of a sufficiency of food and necessaries, for the sustenance of those who are so employed.

In civilized society, the multiplied relations which the varied distributions of property create, tend to render the subject more obscure. Perhaps, therefore, there is no means of forming a more accurate idea of the relative importance of agricultural and manufacturing industry, in increasing the wealth of a community, throughout the whole progress of society, than by considering the relative importance of land and labour, in the formation of wealth, antecedent to the period in which man directed his labour to the object of increasing the quantity, or meliorating the quality, of com-

modities: for agricultural industry maintains, in all periods of society, the same preeminent relation to manufacturing industry, in the formation of wealth, that land then bore to labour; as man, in that state, derived from the spontaneous productions of the earth, accurately and distinctly, the same description of wealth with which, at subsequent periods of society, agricultural industry exclusively furnishes him; whilst, in like manner, manufacturing industry contributes to his wealth in every stage of society, comparatively in the same degree that labour, whether performed by his hands or by capital, did in that early and rude period of his existence.

In different civilized societies, the distribution of manufacturing industry, employed in preparing the produce of the earth for consumption, is various. Great quantities of it, in some communities, are expended for the satisfaction of the desires of a few, whilst the rest of the society unconsciously suffer, not only from the loss of the share of manufacturing industry, in

adapting for consumption what forms the objects of their desire; but from a diversion to the formation of those things that are calculated to flatter the whims of the luxurious, of a great portion of that labour and capital which would naturally, and more advantageously for the community at large, be employed in procuring, by means of agricultural industry, an ample supply of the necessaries of life.

Though, from this circumstance, manufacturing industry, in some societies, acquires an appearance of importance, yet the relation which, from the nature of things, agricultural and manufacturing industry must inevitably bear to one another, never can be altered.

In considering the increase of the wealth of mankind, it is the causes that regulate the distribution of industry, and the consequences that arise from the manner in which it is distributed, that form by far the most interesting objects of speculation: and it is these which will here form the chief subject of consideration.

Before, however, proceeding to this investigation, the relative importance of labour and capital in increasing wealth, whether employed in manufacturing or agricultural industry, presents a question which forces itself into consideration by the manner in which it has been treated by almost all writers on political economy.

The dexterity that man acquires in performing labour, by confining himself to one particular branch, has been dwelt upon from the times of Xenophon to the present day. *

^{* &}quot;Nor are these, which have been mentioned, the only "reasons why the dishes sent from the king's table are "grateful to those who receive them; they are, in themselves, "far more delicious to the taste than others. And, indeed, "it is not surprising that this should be the case; for as "other arts are practised to much greater advantage in "large cities, so the king's viands are dressed in the most exquisite manner. For, in small towns, the same persons are employed to make a bedstead, a door, a plough, a table:—(frequently, too, the very same man is a house-builder, and thinks himself well off if he thus finds a sufficient number of employers to enable him to earn a livelihood. It it impossible, however, that a man practising a great variety of trades can be expert in them "all:)—but, in great cities, where there are many who

This idea has, indeed, been carried so far, that the legislation of some countries seems to have been conducted on the per-

" have a demand for each article, an individual gets a suf-66 ficient living by exercising a single profession; -and not even the whole of that; but one makes shoes for men, and "another for women only. Sometimes even one man 44 maintains himself by sewing shoes, and another by cutting 66 them out: one by cutting and shaping garments, and ano-66 ther, without interfering with any other part of the business, 66 by joining the pieces together. A man, therefore, who con-66 fines himself to one simple department of workmanship, 46 must, of necessity, execute it in the best manner. The case is precisely the same with respect to the preparing of food; 66 for he who has but one and the same person for his bed-" maker, his butler, his baker, his cook, and his caterer, must 44 lay his account with being but indifferently served; but where the sole occupation of one person is to manage the 66 boiling, and of another the roasting of the meat; where one 66 is engaged only in boiling, and another in frying fish; 44 where one makes bread, not of all sorts, but restricts himself 66 to the furnishing of one species of an approved good quali-44 ty; it seems to me, that, while the work is thus arranged, it must, in its several parts, be performed in the most perfect " manner." Cyrop. Book viii.

This passage in Xenophon was pointed out to me by my learned friend Professor Dalzel, to whom I owe likewise the above translation. See the original, Appendix, No. X.

"The advantages accruing to mankind, from their betaking themselves severally to different occupations, are very great and obvious; for, thereby, each becoming expert and skilful in his own particular art, they are enabled to furnish one

suasion, not only that labour was best performed when the attention is confined to one particular branch; but, on the belief that men acquire additional dexterity, in executing that species of labour which they have seen performed from their earliest infancy. On this principle, professions have been made hereditary, as was the case in Egypt in some parts of India, and in Peru. But the inconveniencies of this system are apparent, and the idea has been generally reprobated.

The opinion that the division of labour was beneficial, seems formerly to have been sanctioned by the legislature of this country, as it was enacted by a statute, 27th of Edward III., "That artificers, or handi-"craftsmen, should use but one mystery;" and, of late years, the advantages attending the division of labour have been esteemed of such primary importance, by the author

[&]quot;another with the products of their respective labours, per"formed in a much better manner, and with much less toil,

[&]quot;than any one of them could do of himself."—Harris's Essay on Money and Coins, Part I. p. 16.

of the Wealth of Nations, as to induce him to declare, that "it is the great multiplica"tion of the productions of all the differ"ent arts, in consequence of the division
"of labour, which occasions, in a well-go"verned society, that universal opulence
"which extends itself to the lowest ranks
"of the people." *

The extreme advantage of the division of labour, in increasing wealth, is an idea which appears to be derived from contemplating the number of distinct operations that contribute towards the formation of some of our most trifling manufactures, such as the trade of pinmaking, the profession which is, indeed, generally resorted to, to illustrate the importance of the division of labour.

Even in the conduct of this manufacture, however, the benefit obtained by any degree of habitual dexterity, that can be created by the division of labour, or by the saving of time which would otherwise be

^{*} Wealth of Nations, Vol. I. p. 13. 4to edit.

lost in passing from one species of work to another, nowise contributes towards expedition in forming the article, in comparison of the circumstance of supplanting and performing labour by capital. Without the machinery, which the faculty that man possesses of supplanting labour by capital introduces, no great progress could have been made in the rapidity with which pins are formed; and one man, with the use of this machinery, though he goes through and performs all the operations himself, must obviously manufacture more pins in an hour, than would be performed in a month, or even in a year, by any number of men amongst whom the labour could be divided, if unaided by the circumstance of part of their labour being supplanted and performed by capital.

It is, in truth, the great and distinguishing advantage which man possesses of supplanting and performing labour by capital, in conjunction with the power of directing his labour to the increase of the quantity, and melioration of the quality, of the pro-

ductions of nature; (both faculties peculiar to the human species,) which form the means of procuring the wealth and comforts enjoyed by civilized society.

In the annals of the transactions and negociations that have taken place between different nations on the subject of commercial arrangements, the danger of admitting a country to a commercial competition, because the division of labour was there carried farther than in any other, is a thing unheard of; whilst the constant and uniform ground of objection, urged by men whose prejudices lead them to think that a commercial intercourse may be conducted betwixt two nations, in a manner advantage, ous to one, and injurious to the other, is the superiority that the one country has over the other, derived from dexterity in supplanting and performing labour by capital. *

^{*} See Appendix, No. XI. containing extracts from two different memorials published in France at the time of the Commercial Treaty with this country.

If, indeed, further confirmation was wanting to establish that this is the essential circumstance which gives birth to all improvement in the execution of labour, it is amply to be found in every statement that ever came from any man practically concerned in any branch of manufacture; as it is uniformly to the introduction of some sort of machinery, to the effects of the application of chemistry to manufactures, or to the increase or command of capital enabling the manufacturers to reduce the price, to which the extension of sales is attributed; * and if the explanation that has been given of the nature of the profit of stock is just and satisfactory, it follows, that ascribing the success of a manufactory to the command of capital, is, in other words, attributing it to the circumstance of labour being supplanted by capital, as capital can alone be advantageously and profitably employed in performing this office.

^{*} See, on this subject, Appendix, No. XII. where various examples in support of this opinion are extracted from different commercial publications.

It is regarding the division of labour as the great source of human improvement, that has led the author of the Wealth of Nations to state, that "the impossibility of "making so complete and entire a separa-"tion of all the different branches of la-" bour employed in agriculture, is perhaps "the reason why the improvement of the "productive powers of labour in this art "does not always keep pace with their im-"provement in manufactures;" * whereas, in reality, nothing exhibits in so striking a point of view the improvement of the human race in the dexterous execution of labour, as the expedition and success with which, by two or three individuals, a large field is prepared for the reception of seed, compared with the time that it would cost ten times the number of men to do the same work, if unaided by the operation of capital in supplanting labour; and with the imperfect manner in which it would, after all, be executed, if the work was to be performed by the hand of man alone.

^{*} Wealth of Nations, Vol. II. p. 8. 4to edit.

Nothing has a more powerful effect in misleading even the best and most accurate understandings, than an anxious desire to maintain a favourite opinion, or to support a favourite theory; and there is perhaps no stronger illustration of this unfortunate tendency, than what is to be derived from the strained manner in which it has been attempted to establish the opinion, that the division of labour is the cause of that universal opulence which fortunately prevails in many civilized societies.

To impress this belief, the introduction of machinery has been stated as originally owing to the division of labour, of which it is considered as a mere consequence.

But, in truth, the history of man shows us, that the simplest and most efficacious machines for supplanting labour—(instruments with which habit has so familiarized us, that we hardly dignify them with the name of machinery)—are introduced, at an early period of society, when the division of labour is comparatively unpractised and unknown, for the purpose of supplanting

the personal labour of man in the conduct of agricultural industry;—an art which, though its pre-eminence in the production of wealth is acknowledged, (even by those who wish to establish, that the division of labour is the great source of the increased opulence of mankind,) is in no period of society distinguished by reaping benefit from the division of labour. *

* "The superiority which the industry of the towns has "everywhere in Europe over that of the country, is not alto"gether owing to corporations and corporation laws. It is
"supported by many other regulations. The high duties upon
"foreign manufactures, and upon all goods imported by alien
"merchants, all tend to the same purpose. Corporation laws
enable the inhabitants of towns to raise their prices, without
fearing to be undersold by the free competition of their own
countrymen. Those other regulations secure them equally
enables that of foreigners. The enhancement of price occasioned by both, is everywhere finally paid by the landlords,
farmers, and labourers of the country." Wealth of Nations,
Vol. I. p. 159. 4to edit.

"Land, mines, and fisheries, require all both a fixed and a "circulating capital to cultivate them; and their produce replaces with a profit not only those capitals, but all the others in the society." Ibid. p. 338.

"This impossibility of making so complete and entire a separation of all the different branches of labour employed in
agriculture, is, perhaps, the reason why the improvement of
the productive powers of labour in this art does not always

Neither does it appear, that there is any ground for attributing to this circumstance the modern improvements of machinery, in the conduct of manufacturing industry. The division of labour tends to confine the attention; and, of course, the knowledge of the workman, to the performing of one simple operation: whereas, the perfection of manufacturing machinery is to combine and embrace the execution of the greatest possible variety of operation in the formation of a commodity, by the use of

Though, from the two first of these passages, it appears that land is considered by the author of the Wealth of Nations as the great, and almost sole, source of wealth; and though, in the third passage, agriculture is stated to reap comparatively but little benefit from the division of labour; yet, in the last, the division of labour is deemed to be the cause of that universal opulence, which, as a well-governed society, extends itself to the lowest ranks of the people.

How can these opinions be reconciled?

[&]quot;keep pace with their improvement in manufactures." Ibid. p. 8.

[&]quot;It is the great multiplication of the productions of all the different arts, in consequence of the division of labour, which occasions, in a well-governed society, that universal pullence which extends itself to the lowest ranks of the peofice." Ibid. p. 13.

one machine.* It appears, therefore, that the habits of thinking, which the division of labour tends to generate in the manufacturer, (if they have any effect on the invention and improvement of machinery,) must be detrimental; as they are destructive of that train of thought which leads to the perfection of machinery.

Indeed, the division of labour has been recently regarded as hostile to the perfection of manufacturing industry by some writers, who, without any display of theory, exhibit great practical intelligence concerning the conduct of our manufactures. In some of our most successful and important branches of manufactory, those

^{*} Of this any one may be satisfied, who chooses to look at the cotton mills now in use, or at the machines formed on the model of that at Derby, for the erecting of which, in 1734, Parliament rewarded Sir Thomas Lombe.—" This machine is "said to have contained 26,586 wheels, and 97,746 move-"ments, that work 63,726 yards of silk at every turn of the "wheel; that is to say, 318,504,960 yards in twenty-four "hours, at three turns of the wheel per minute." Advantages and Disadvantages of Great Britain with regard to Commerce, p. 122. Lond. 1754.

companies are stated to be the most prosperous, who concentrate, under one concern, the whole process the raw material undergoes, till it is fit for use. To this concentration the cotton trade is said to be indebted for its present flourishing state; and the same system is now prevalent in the manufacture of woollen cloth. The routine of business, when conducted in this manner, is reduced into so regular a form, and so little time is lost in going from one operation to another, that the manufacturer, two months after receiving the raw material from the merchant, can with ease return the piece goods ready for exportation, which could not be effected, if all the various operations were subdivided, and the conduct of each formed the object of a separate concern. *

^{*} A few years ago, (and in some parts it is still so,) the carders and rowers of cotton wool were a distinct body from the spinners of the yarn; but now the majority of our spinners find it much more to their interest to embrace and carry on this branch of the business within themselves; and the most prosperous companies in the trade are those who concentrate, under one concern, the whole process of the manufactory from the raw

The eagerness and anxiety of the author of the Wealth of Nations to enforce this

material, until the article is fit for use. The routine of business is reduced to so regular a form, so little time is lost in going from one operation to another, and articles of such superior texture are produced at so easy a rate, that I may safely say, to this concentration alone is the cotton trade indebted for its present flourishing situation; and were the whole manufacturers throughout the kingdom thus to be combined, it would turn easily upon one hinge without grating or jarring.

It is a known fact, that, in this mode, the manufacturer has frequently received the raw materials from the merchant, and in the course of two months returned the piece goods ready for exportation. But, if these different operations are subdivided, could we supply the foreign merchants with the best piece goods at the lowest prices?—Circumstances which increase the demand, and are undoubtedly objects of the greatest national advantage. No persons, therefore, but those who confine themselves solely to the exportation of twist, can object to this plan; and their objections are only grounded upon their individual interests, not those of the country.

The dyers also, by adopting this course, have risen to what they now are. They were formerly employed, by the country people and shop-keepers, to stamp and dye remnants of cloth; and thus acquired the name of stampers or printers.

These fancy articles came into vogue, and the demand for them increasing, the printer augmented his number of hands.

In the course of time, in the country, the printer's establishment being increased, he did not choose to risk a precarious employ, but began to purchase the cloth itself, and proceed to print on his own account. This being one step to improvement, he next found it would be still more to his ad-

his favourite opinion, has made him assert, that "a great part of the machines em-

vantage to become his own weaver; this measure also succeeds; and in the course of a short time, he betakes himself to spinning, and we find him ultimately his own spinner, weaver, bleacher, dyer, and printer, and enabled to produce an elegant fabric at an easy rate.—Observations founded on Facts, upon the propriety or impropriety of exporting Cotton Twist, by G. Walker, p. 26, printed 1803.

To the same effect is the following quotation from the Statistical Account of the Parish of Galashiels:

" Of those who purchase wool, and superintend the whole " process of making it into cloth, there are 13 masters who " employ, at present, 50 journeymen and apprentices in assort-" ing, scouring, and scribbling the wool, before it is given out to " spin, and in scouring, milling, dyeing, cropping, pressing, and "finishing off the cloth. The unwearied attention which they " bestow on all the various departments of their complicated "employment, and the proficiency which they have attained, " have obtained for them, many years successively, almost all "the premiums advertised by the trustees for cloth of 5s. 4s. " 3s. and 2s. value per yard. It is, however, on the whole, rec-"koned a disadvantage, that so many different objects must "occupy their attention. In England, there are wool-sorters " who buy and prepare the wool for spinning; spinsters who "buy it, and sell the yarn to weavers, who again sell the webs " after they are wrought and scoured. In some places, they " are purchased by dyers, and after being milled and dyed, " are sold again to those whose province it is to fit and po-6 lish them for the market. From the materials thus becom-"ing the actual property of those through whose hands they " pass, in the different stages of the work, it may be pre" ployed in those manufactures in which " labour is most subdivided, were original-

" sumed, that the several parts of it will be more expedi-"tiously and better done, to insure its selling quickly and " to good advantage. As spinsters will learn to examine the " wool, weavers the yarn, and dyers the web, before making " a purchase, all of them are thereby stimulated to take the " greater care, and to avoid all faults and blemishes, which " would hurt the sale, or lessen the profits of their labour. " Besides, it seems probable, that the fewer employments any " man follows, the greater will be his proficiency in them. They who constantly and exclusively are kept scribbling "wool, will make more, and to better purpose, than others "who are accustomed equally to perform every branch of " the manufacturing line. In like manner, the finest dye will " always be given by him whose sole business it is to mix " and prepare the colours and fix them on the cloth; and the " smoothest polish will come from the hands which are only " put forth to the shears, the teazle, and the press. In opposi-" tion, however, to this reasoning, specious and conclusive as "it may appear, some intelligent manufacturers have pre-" ferred their own method of conducting the whole process " from first to last; asserting, that, from universal experience, 66 the yarns and webs which they purchase are greatly in-" ferior to those made under their own eye; and assigning as "the reason of this inferiority, that having the absolute di-" rection both of spinning and weaving, and a perfect know-" ledge of the respective abilities of such as they employ in 4 these departments, they must easily perceive, and can keep 6 out of their webs, all faulty yarn; they must be acquainted " with all defects in weaving; and if they are of a nature not to be corrected or concealed by the subsequent operations " which the cloth undergoes, they can make both spinsters

"Iy the inventions of common workmen,
who being each of them employed in
some very simple operation, naturally
turned their thoughts towards finding
out easier and readier methods of performing it." *

The inaccuracy of the fact cannot escape any one conversant with the history of machinery; but if it was true, it would unfortunately have, in some degree, the effect of overturning the very opinion it is meant to support; as it would prove, that the division of labour had not the same happy effect in the improvement of machinery, that it is said to have in the manufacture of other things; common workmen, or men who execute a variety of other work, hav-

[&]quot;and weavers accountable for the several mistakes which cannot thus be amended. And the excellence of all cloth depending, in a great measure, on the equality of the yarn, both as to fineness and twisting, they have the advantage of knowing and employing the hands which come nearest to each other in these respects, and the weavers who excel in working fine or coarse yarn "—Statistical Account, Yol. II. p. 311.

^{*} Wealth of Nations, Vol. I p. 12, 4to edition.

ing been more fortunate in inventing and improving machines than machine-makers, or men whose labour is solely confined to that particular employment.

The truth is, the division of labour contributes (as is well illustrated in the passage of Xenophon formerly referred to) * much more to the nice execution of some branches of refined manufacturing industry, than, as is generally conceived, to any branch of manufacturing industry being executed with great increase of rapidity. In this last respect, too, it may have some influence, in consequence of its tendency to improve the dexterity of the workmen; but this circumstance co-operates, in so small a degree, with the power of performing labour by capital, in producing this effect, as nowise materially to invalidate the general conclusion.—That it is to the characteristic faculty which man possesses, from the earliest period of his existence, of applying mechanical principles to the construction of tools and machines, calculated to perform and supplant labour, and to his powers of using capital for the same purpose in all his commercial relations, as well as in every transaction which requires the exertion of labour, that he owes the ease and wonderful rapidity with which labour is executed; and, consequently, that extended opulence which expands itself throughout civilized society.

"It is evident, upon a moment's reflec"tion," (says an anonymous writer, who
seems to possess a thorough knowledge of
all our manufactures,) "that almost every
"convenience and external comfort we en"joy, depends upon the singular skill of
"man, in the invention and use of ma"chines. By this skill our fields are cul"tivated, our habitations are raised, our
"garments are manufactured, our ships are
"built, and knowledge is acquired and dif"fused, in company with the general ad"vantages of commerce, from pole to pole.
"Read the history of mankind; consider
"the gradual steps of civilization, from

"barbarism to refinement, and you will
"not fail to discover, that the progress of
"society, from its lowest and worst, to its
"highest and most perfect state, has been
"uniformly accompanied, and chiefly pro"moted, by the happy exertions of man,
"in the character of a mechanic or engi"neer. Let all machines be destroyed,
"and we are reduced in a moment to the
"condition of savages; and in that state
"man may, indeed, exist a long time,
"without the aid of curious and complex
"machines; though, without them, they
"can never rise above it." *

When Mr Hume, in the middle of last century, supposed that the progress of human industry, in any country, was bounded and confined by the check it must receive from the augmentation of wages, and "that manufactures gradually shift their places, leaving those countries and pro-"vinces which they have already enriched,

^{*} Letters on the utility of employing Machines to shorten Labour, printed 1780.

"and flying to others, whither they are " allured by the cheapness of provisions " and labour, till they have enriched these " also, and are again banished by the same " causes;" * he did not sufficiently attend to the unlimited resources that are to be found in the ingenuity of man in inventing means of supplanting labour by capital; for any possible augmentation of wages that increased opulence can occasion, is but a trifling drawback on the great advantages a country derives from the ingenuity of man in supplanting labour by machinery, as well as from capital laid out in roads, canals, bridges, inclosures, shipping; and employed in the conduct of home and foreign trade, all of which is alike engaged in supplanting the necessity of paying the wages of labour. †

^{*} Discourse on Money, p. 43. Edin. 1752.

[†] The evidence of Mr John Wallington, clothier of Stinch-combe in Gloucestershire, strongly shows the important effects of machinery in checking the rise of price, that would raturally take place, in consequence of the augmentation of wages. He states, "That, during his experience, Spanish" wool has risen 100 per cent.; he uses no English wools:

The progress made of late years in Scotland, in the art of distilling spirits, affords a strong illustration and example of the vast resources of human ingenuity in abridging labour by mechanical contrivances.

In the year 1785, a proposal was made to collect the duty on the manufacture of spirits in Scotland, by way of licence, to be paid annually for every still, according to its size, at a fixed rate per gallon, in lieu of all other duties.

The London distillers, men the most experienced in their profession, who agreed to the rate of the licence on the gallon, supposed to be equivalent to the former duties, declared themselves from experience satisfied, that the time of working stills

[&]quot;That the increase of wages has been 100 per cent. in the cloth-working branch; and that the increase in the price of cloth has been an advance of about 30 per cent. That the use of machinery, principally, is the reason, in his opinion, that the prices of cloth have not increased in the same ratio with the prices of labour, and of the raw material used in the manufacture."—Report of the House of Commons from the Committee on the Woollen Clothiers' Petition, 1783, p. 9.

with benefit was limited to an extent perfectly well known, and that whoever exceeded these limits, would infallibly lose, upon his materials and the quality of the goods, what he gained in point of time; and, in conformity to their opinion, the duty was, in the year 1786, settled, upon the supposition that stills could be discharged about seven times in a week.

Two years after this, in a memorial presented to the Lords Commissioners of the Treasury, the same men alleged, that the Scotch distillers had, by the ingenuity of their contrivances, found means to discharge their stills upwards of forty times a week; and we since know, from a report made to the Lords Commissioners of the Treasury, in the year 1799, that a forty-three gallon still was brought to such a degree of perfection, as to be discharged at the rate of once in two minutes and three quarters, which is almost twenty-two times in an hour. * It appears also from this re-

^{* &}quot;In a letter which I received a few days ago from Mr

port, that the operation of distillation was capable of being performed in a still shorter time, and that the quality of the spirit was nowise injured by the rapidity of the operation. *

Yet, in the conduct of this extraordinary improvement in the manufacture of spirits, there was no aid derived from the division of labour, nor could it once be thought of as a possible resource.

Illustrations to the same effect might be brought from the wonderful improvements made of late years in bleaching, dyeing, spinning, weaving, as well as in the manu-

[&]quot;Millar, he informs me, that he has made a new still of the same kind, that contains only forty gallons in the body, and three in the head, forty-three gallons in all: and that the state of working with this still is as tollows:—From the commencement of the charge till the word is given to let off, two one-fourth minutes; time of discharging half a minute; making the time of charging, running, and discharging, two three-fourth minutes only, which is almost twenty-two times in an hour."—Memorial of Dr Jeffray respecting the Distillation of Spirits; printed in the Appendix to the Report on the Distilleries of Scotland, 1799, p. 392.

facture of iron and copper, none of which derive, in their details, the smallest benefit from the division of labour.

The annals of the art of weaving, from the earliest period, afford no record of any benefit that can be pretended to be derived from the division of labour. In the present improved state of this most important branch of our manufactures, the whole labour of forming the web, after the arrangement of the work, is, as it was in the rudest state of the art, the task of one man. Yet. when we compare the ease and expedition with which the weaver now executes his web in a loom, moved by water or by steam, with the process of taking up thread after thread, and counting and sorting them each time the woof is passed between them, there is no manufacture in which our progress towards wealth is more conspicuous. The rapidity with which webs of the finest texture are now executed by the aid of machinery is generally known; and Dr Robertson, on the authority of Ulloa, after describing the native American as pursuing the tedious method of weaving we have contrasted with the modern practice, states, that upwards of two years was frequently spent in finishing a small piece of the coarsest cloth. *

Though the division of labour, therefore, may tend to produce superior execution in some refined arts, it is with confidence we again repeat, that the universal opulence which extends itself over civilized society, conferring "on the frugal European pea-"sant comforts and accommodations ex-" ceeding those of many an African king, "the absolute master of the lives and liber-"ties of thousands of naked savages," + is to be attributed to two circumstances, both peculiar to, and characteristic of, the human species;—to the power man possesses of directing his labour to the objects of increasing the quantity, and meliorating the quality, of the productions of nature;—and to the power of supplanting and performing labour by capital.

^{*} Robertson's History of America, Vol. I. Note 83:

[†] Wealth of Nations, Vol. I. p. 15. 4to edit.

As these great sources of human improvement are common to all mankind, it becomes an interesting object of inquiry,—why all civilized societies have not derived equal benefit from them?—and what are the circumstances that retard the progress of industry in some countries, and that guide its direction in all?

The effect of demand in regulating the quantity, the nature, and the quality, of those things which are produced by the labour of man, has been already pointed out and displayed. If the world had only one inhabitant, and if we could suppose that the time of this solitary individual was fully occupied in procuring and forming for himself the various objects of desire he wished to enjoy; it is evident, that a sudden fancy to enjoy more of any one particular article than the portion of labour he employed in obtaining it was capable of furnishing, would create a necessity of his allotting, for this purpose, a farther portion of the time which he spent in procuring some less pressing object of his desire, in

order that he might acquire an additional quantity of the commodity of which he designed to increase his consumption.

Now, an increased demand has a direct tendency to produce the same effect in the arrangement of the labour of a society, that such a wish would produce in regulating the conduct of an individual.

The advanced price, in consequence of an extension of demand, operates not alone as an encouragement to exertion in those who manufacture the commodity, for it creates a necessity of abridging the consumption of some less pressing object of desire, in order that the goods which were appropriated to acquire it, may be applied to pay the advanced price of the commodity for which there exists an increased demand; and thus a quantity of labour is let loose from the manufacture of those things for which the demand is abridged, at the very time that its application is directed to, and encouraged in, the formation of that for which the demand is increased. By this means, an alteration is produced in the arrangement of the labour of a society, precisely similar to that which would be produced in the conduct of an individual, (whose time was fully occupied in procuring for himself the objects of his desire,) by a wish to increase his consumption of any one article.

It is thus, (as has been already explained,) * that demand as effectually regulates the distribution of industry in every society, as the wishes and inclination of an individual decides his conduct, and directs his efforts. Whatever, therefore, fixes or determines the proportion of demand that exists for different articles of wealth in any society, must regulate the distribution of its industry.

Neither the private interests or prejudices of particular orders of men, nor the policy of different governments, can succeed in directing the industry of a country into any particular channel, but through the medium of augmenting the demand for the

^{*} See page 105.

commodities which that species of industry produces. The despotic orders of a government, dictated by the vain speculations of its rulers, if not calculated to make an alteration in demand, can produce no permanent effect on the direction of human industry. Pecuniary aid and assistance given to the manufacturer, may create, and even sustain, a losing trade; but demand alone can create a flourishing trade, or direct the permanent application of the industry of a country into any particular channel.

The great and important step, therefore, towards ascertaining the causes of the direction which industry takes in nations which are, to a certain degree, advanced in skill, dexterity, and judgment, in the means of executing labour, seems to be the discovery of what dictates the proportion of demand for the various articles which are produced; and though this may not be at first sight apparent, yet a little attention to the arrangements and conduct of men in civilized society will, perhaps,

authorize the opinion, that it is not totally impossible to discover what it is that causes that variety of demand for different articles, which is observable not only in different countries, but even in different places in the same country.

The first, the universal, and the most ardent desire of man, is to procure what merely constitutes food; the next is most undoubtedly to guard himself from the inclemency of the season. These desires he seems to possess in common with all other animals; and they are perhaps the only feelings, in relation to wealth, that nature directly implants; for, on examination, we shall see reason to think all farther desires, with regard to wealth, (which are peculiar to the human species,) arise from the circumstance of the possession of wealth, which man alone, of all animals, seems to have the faculty of increasing by his own exertions.

We often see the poor man living on coarse bread, made of inferior grain, satisfying his thirst with water, covering him-

self with tattered garments, lying on straw, and enjoying, even in that state, contentment and felicity. Increase his wealth, his desires extend themselves, and though, perhaps, it does not add materially to his happiness, he eats bread made of better grain, drinks some sort of liquor prepared by art, covers himself with better clothing, procures a comfortable habitation, and, in proportion as he extends his wealth, he naturally enlarges his desires to views of comfort in his clothing, as well as in other articles.

But a demand for what constitutes the luxuries of life, can only exist on the part of those who possess wealth beyond what enables them to acquire the things which the habits of mankind induce them to regard as necessaries. For demand, in the mercantile sense of the word, is not to be considered as a mere wish or desire, but as a desire attended with the means of satisfying the object of it; it is the possession of these conjoined that constitutes what the author of the Wealth of Nations has called

the Effectual Demander; * that is, the person with a view to whom the commodity can, in speculation alone, be manufactured or brought into the market.

Goods, indeed, may appear for once in a market where there is no effectual demander; though that is not very probable, as the foresight of mankind generally operates as a preventive check; and by this means it happens, that, without even an experiment, the extent and gradations of fortune seem universally to influence the quantity and quality of what is offered for sale.

Thus, if the whole island of Great Britain was suddenly divided into small properties of one hundred pounds a-year each, no parliamentary regulations or encouragement could possibly prevent the extinction of the manufacture of those costly carriages, the purchase of which might exhaust upwards of four years revenue of one of those limited fortunes. It is, on the

^{*} Wealth of Nations, Vol. I. p. 68, 4to edition.

other hand, obvious, that any regulation which could at once unite the property thus divided into fortunes of ten thousand a-year each, must, independent of all encouragement, and in defiance of even very heavy taxation, instantly restore the demand for, and of course the manufacture of, those vehicles.

The distribution of property could not, however, be changed from fortunes of one hundred to fortunes of ten thousand ayear, without, in every instance reducing ninety-nine families, antecedently possessed of one hundred a-year each, into a state of dependence for sustenance and employment upon each of those men, amongst whom the property of the country by this hypothesis would be divided. The goods which the man of ten thousand a-year would immediately apply to the acquisition of carriages and other luxuries, must of course be withdrawn from expenditure in those things in the acquisition of which they were employed, when fortunes were divided into one hundred pounds per annum.

Each of the individuals who, antecedent to the supposed change in the arrangement of property, possessed a hundred pounds ayear, might naturally wish and desire to obtain the things to which he was habituated; but as this wish could no longer be accompanied with the means of obtaining the object, it could no longer give rise to a demand. Of course, the demand for that class of commodities must be diminished; and the reduction of their value, created by this diminution of demand, must discourage that direction of industry, at a time when, in consequence of the supposed new arrangement of property, the demand for articles of luxury would raise the value of labour employed in the formation of them; and thus effectually direct the labour of those who were thrown out of employment, to that channel in which, by the new arrangement of property, it was sure of being cherished by a constant demand.

On the other hand, if the property had remained divided into small fortunes of one hundred a-year each, what would have

been the consequence?—Experience shows us, that proprietors of this class live, in general, on their estates; indeed, want of means to defray the necessary expences of travelling confines them at home; and as there is nothing so salutary for the improvement of a country as the eye of a proprietor, confined to a space of territory which he can himself manage; so likewise, the expenditure arising from the residence of the proprietors must naturally encourage the industry of the country, and of course discourage those refined manufactures, the result of the accumulation of labour on raw materials, which distinguish the industry of towns.

This view of the subject inevitably leads to the suspicion, that it is the distribution of wealth which regulates the portion of demand for different descriptions of commodities, in as cogent a manner as demand regulates the direction of the industry of a society, and of course the formation of wealth.

Demand, as has been remarked, arises not only from having a wish or desire to

possess à particular object, but from the desire of possessing being combined with the means of acquiring; and it is here most important to remark, that though the mere wish or desire of possessing can never furnish the means of acquiring, yet a little observation on the conduct of men shows us, that the means of acquiring very certainly and very rapidly instil the desire of possessing. It seems, therefore, an undeniable inference, (if demand proceeds from the desire of possessing, combined with the means of acquiring,) that the distribution of wealth, which at once furnishes the means of acquiring, and regulates the desire of possessing, must imperiously determine the nature and extent of demand. *

But it is not general reasoning alone which produces a conviction, that the dis-

^{*} The general feeling of mankind, of the incompetency of a mere wish or desire to constitute a demand, is forcibly expressed in the common and well-known proverb, If wishes were horses, beggars would ride; and the rapidity with which the means of possessing communicates the desire of enjoyment, is expressed with equal energy in another proverb, Put a beggar on horseback, he'll ride to the devil.

tribution of wealth, in all societies, must ultimately regulate the formation of wealth. The same conclusion may be deduced, by a still plainer and more familiar process, from an examination of the situation, the habits, and the distribution of the property of mankind;—a view of the subject which may be illustrated by examples innumerable, uniformly evincing, that, in every society, it is the wealth of the consumers who resort to the market, and the manner in which it is distributed amongst them, that universally decide both the quantity and quality of the goods that are exposed to sale.

We have often occasion to remark, in many of the small fishing-towns of England, where the goods generally exposed in the shops are of a nature adapted to the demand dictated by the property of the inhabitants, that the summer season no sooner invites to the coast a number of opulent families, for the purpose of bathing, than there is transferred thither a quantity of goods suited to the demand which the for-

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tunes of those who for a time visit the place create; and the residue of these goods is at the end of the season constantly removed, because the fortunes of the natives are not such as to create a demand for commodities of that nature.

It is to be observed too, that for the good of the place, as well as of those new shopkeepers who resort to it, it is necessary that those who thus for a time reside in it should not be too affluent; for the tastes and habits which extreme affluence generates, naturally induce those who possess it to bring from a distance their wines, and many other articles of their consumption, as well as to send to the capital for any new ornaments, or additional articles of clothing, which the fancy of the day may suggest as desirable; so that not only the affluence of those who resort to the market, but even the degree of affluence, seems to decide on the nature and extent of the demand, which may be diminished as much by the extreme riches of the temporary visitants as by their poverty.

It was the luxurious habits of the French Court, generated by extreme affluence, that, with justice, gave rise to the complaint uniformly made by the inhabitants in and around Fountainbleau, that the short residence of the Sovereign, in summer, created an additional demand for nothing but eggs, milk, and butter, as the courtiers brought almost every other article of consumption along with them; and it is not improbable that shopkeepers and traders in and around that town, are at present deriving more benefit from its being converted into an English prison, than they did from its being resorted to by the Court of France.

The curing of fish is a means of increasing food, and of course wealth, which has occupied the attention of many of the maritime powers of Europe. The legislature of this country has, in particular, made repeated inquiries, enacted various regulations, and given, at different periods, very considerable bounties for improving and encouraging the curing of herring.

The great object has been to imitate,

and, if possible, to rival, the Dutch in this undertaking; but the inquiries of committees, the regulations in consequence of their reports, the bounties and encouragements granted by law, the instructions given by Dutchmen dispersed throughout our fishing towns, to teach the process which has succeeded in Holland, have all proved ineffectual. The herrings produced are as inferior in quality as ever to those cured in that country, and must remain so, if there was even much greater encouragement given; for the consumers of the greatest part of the herrings cured in this country are the poorest of all men,-men absolutely deprived of the power of possessing property, the slaves in our West India colonies; whilst the consumers of the herrings cured in Holland are men of property and affluence in Germany and other parts of Europe, at whose tables that fish is introduced as an article of luxury. Till, therefore, the West India proprietor becomes as nice about the victuals of his slaves, as a German Prince is about the luxuries produced at his table, this country can never expect to see the curing of herring brought to an equal state of perfection as in Holland; for the fortunes of the consumers in Germany make the excellence of the commodity the sole recommendation in that market; whilst the situation of the slaves makes the cheapness the only recommendation in the West India market.

Let any man examine the wretched clothing sent from this country to cover those who are employed in the cultivation of the sugar-cane; and then let him reflect, whether, if this was the chief source of demand for our linen and cloth, any possible bounty could induce our manufacturers to produce lawn, cambric, or fine broad-cloth.

This nation is at present the greatest commercial country in the world. There is hardly any people, in any climate, with whom our merchants have not dealings; and if we examine the cargoes that are made up to suit the demands of different nations, we shall uniformly observe, that it

is the distribution of property, in each country, that dictates the nature and quality of the goods that are sent to it.

In India, property is most unequally divided. The poor man possesses the necessaries, but has not wealth sufficient to suggest a desire even for the comforts of life. The rich possess not only wherewithal to pamper their appetites, but sufficient to satisfy their most refined desires. Accordingly, the cargoes which our India captains carry out, if meant for sale in the country, and not for the supply of the Company's servants, uniformly consist of the most expensive clock-work, of mirrors of the greatest size, of fire-arms of the most distinguished workmanship, of lustres, and other ornamental articles, of a value even beyond what any European market requires.

In the United States of America, on the other hand, property is more equally divided than perhaps in any other country. Almost every man possesses not only the means of procuring the mere necessaries of life, but his wealth is such as to extend his

demands to some articles of comfort in clothing, furniture, and habitation; and there is hardly such a thing as a princely or overgrown fortune. * Accordingly, the goods sent to the American market are all comparatively low-priced, things calculated to secure comfort, not to attract admiration.

Send to India a cargo of goods assorted for this market; they will find no sale. The poorer orders might, indeed, have a wish for articles of this sort; but in a country where three half crowns *per* month is the usual allowance for wages, food, and clothing, they cannot have the means of procuring them; and a wish, unaccom-

* "The truth is, that, though there are in America few people so miserable as the poor of Europe, there are also very few that in Europe would be called rich; it is rather a general happy mediocrity that prevails. There are few great proprietors of the soil, and few tenants; most people cultivate their own lands, or follow some handicraft or merchandise; very few rich enough to live idly upon their rents or incomes, or to pay the high prices given in Europe for paintings, statues, architecture, and the other works of art, that are more curious than useful."—Information to those who would remove to America, by Dr Franklin, printed 1784, p. 5.

panied with the means of obtaining a commodity, never can constitute a demand. Neither could there exist, on the part of the native princes, any demand for such articles. They, indeed, have amply the means of obtaining them; but this, without the wish or desire to possess them, cannot constitute a demand; and these are not the commodities for which opulence creates a desire. The things for which riches dictate a demand are articles scarce and rare, calculated to display splendour, and excite admiration,—

" Non usu plebeio trita voluptas," *

But the effect of the distribution of property is not alone to be traced out by contemplating its influence in determining the direction of manufacturing industry: it even goes so far as to regulate and decide the nature and condition of the animals reared and brought to the market for the food of man.

England is the only country in Europe

^{*} Petron. Arbiter, Sat. cap. cxix. 8.

where wealth is so diffused, that the great body of the manufacturers, that is, a great proportion of the people, can afford to enjoy a mixture of animal with vegetable food for their nourishment. *

Where the wealth of man admits of his using a portion, but not of his enjoying a superabundance of animal food, it becomes desirable that it should be as fat as possible; as meat in this state goes furthest to season, relish, or kitchen, as it is vulgarly called a quantity of potatoes, pulse, or other vegetables. It is from this circumstance, that we find in England the fattest and the greatest quantity of fat meat in the world; for no one who will read the numerous publications that have of late years appeared on agricultural subjects, can entertain a doubt, that it is the ease and afflu-

^{*} That man can be nourished at a much cheaper rate on vegetable than on animal food, is apparent, from the circumstance of the large quantity of land requisite to raise enough of animal food for his sustenance, compared with the small quantity of land that will produce a sufficiency to maintain him on a vegetable diet. On this subject, see Appendix, No. XIII.

ence of the lower orders of the people, enabling them in part to subsist on animal food, and the circumstance that fat meat goes furthest in mixing with vegetables, from whence the demand for meat in this state arises.

Of the new Leicester breed of sheep, now so much run upon, and so famed, for what, in the language of the grazier, is called their fatting quality, proportionally speaking, none go to the London market; that is, arrive at the table of the luxurious. Leeds. Manchester, Birmingham, Wakefield, Newcastle, the seats of our manufactories, are the markets in which they are eagerly sought after, and the places where they are in general consumed. And if the wealth of the country was not so distributed as to put it in the power of this class of men to enjoy animal food, there would be no demand for meat fed to this extent; because that extreme degree of fat is a quality, which, far from recommending it to, would banish it from, the tables of those whose

opulence has trained them on to delicaey and refinement of taste.

"On going to market one day, to sell our fat cattle," (says a respectable and very intelligent farmer,) "I was overtaken by a gentleman from Scotland. Farmer, said the gentleman, You make your sheep so fat, that I could not eat the mutton. It matters not, Sir, replied I, because we have plenty of customers for this kind of mutton; and allow me to say, it is very happy that the great consumption does not depend upon such as you.

"Ask the pitman, the keelman, the wool-comber, the weaver, the fabrica"tors of metals, and all those various but valuable class of manufacturers which abound in different parts of this island, which of the two kinds of mutton they prefer? would they not readily answer, Take you the lean meat, large-boned, and black gravy, but give us the smallboned fat meat, with oil swimming in the dish. And are not these the men

"that make the greatest consumption in fat mutton, beef?" * &c.

In some parts of the south of Scotland, the desire of imitating the improvements of their neighbours in England, has introduced the new breed of sheep, whose propensity to fatten has made them so much sought after. On the banks of the Tweed, in particular, such flocks are to be found. But there are few parts of that country where the lower orders habitually live on animal food. Morpeth, from its vicinity, is the market to which they are generally sent; because, says the intelligent author already quoted, "the natives of Scotland " have not as yet learned to eat fat mutton, " like the pitmen and keelmen about New-" castle." The truth is, the common people of that country do not possess wealth sufficient to enable them to consume animal food, otherwise it would not require much learning to give them a taste for fat

^{*} Observations on Live Stock, by George Culley, pp. 125, 126.

meat; for whenever they do acquire the means of consuming a mixture of animal with vegetable food, the taste for meat in that state at once displays itself. The proof of this is, that Glasgow and Paisley, the only places in Scotland where the body of the people possess that degree of opulence, are known to be the only markets for very fat meat; that is, the markets where the demand for meat in that state ensures a superiority of price.

Innumerable illustrations might be brought, uniformly tending to show, that the distribution of property determining the nature of demand, alone regulates and decides the channels in which the industry of every society exerts itself. Perhaps, however, there is not a more powerful method of bringing home this great and leading truth to the conception of every man, than by taking a general view of the state in which property has existed in France and Great Britain, the two countries in Europe most distinguished for opulence and refinement; and then contemplating

the method in which the distribution of their respective wealth has marked, distinguished, and characterized, the industry of both these countries.

In Great Britain, as we have already observed, wealth is more generally diffused than in any other country. Though there exist some great and overgrown fortunes, they do not appear to have been formed at the expence of entailing general poverty on the community. The yeomen in some parts of the country, the farmers and manufacturers in all, when compared with those of any European nation, have always been distinguished for the ease and even the opulence which they enjoy.*

In France, on the other hand, the wealth of the country for centuries was shared out and confined amongst the Nobility. They too had universally the habits of sacrificing the interests of their daughters and youngers sons to increase the wealth, and perpe-

^{*} Lord Bacon's History of Henry VII.

tuate the power of their representatives:—
for the victims of the female sex, Convents
furnished an asylum and retreat; whilst
Monasteries, Church-benefices, and the
Army, were uniformly resorted to as
means of providing for the younger sons.

"France" (says a well informed author, who wrote in the middle of the last century) " concentres in Versailles and Paris, " as in a single point, all the powers which " can attract mankind,—to Court, on ac-" count of the greatness and honours, which "can be attained nowhere else, and which " are for none but those who live at it :-" to Paris, in which are not only all the " treasures of the state, but where all those " subjects of the state reside who are rich, " either through the public or their own " private revenue; so that all the wealthy " have fixed their habitation in this town. "from a preference owing to the neigh-"bourhood of the Court." * It is to be

^{*} Remarks on the Advantages and Disadvantages of France and Great Britain with respect to Commerce, 1754, p. 42.

observed, too, that the privileges and exemptions from taxation enjoyed by the Nobility, greatly added to the effects of the unequal division of property; for by this means, in proportion as the public debt and the expences of the Court increased, the unequal distribution of riches became more marked and perceptible; whilst the effects of this inequality appeared more forcibly from the extravagance of that Nobility in whose hands the wealth of the country was concentrated: "That class, "who, in the service of the nation, have " always spent the capital of their for-"tunes, and who, when they are ruined, " give way to another set of the same "class, who in like manner spend their " capital." *

Indeed, in no country was there to be found a portion so considerable of its riches

^{* &}quot;Cette partie de la nation qui sert toujours avec le capi"tal de son bien, qui quand elle est ruinée donne sa place à
"une autre qui servira avec son capital encore."—Esprit de
Loix, Liv. xx. Chap. xx.

shared out in large fortunes amongst so small a number, the expenditure of which uniformly and constantly took place on the same spot.

"The opulent man, who lives on his

fortune, without any employment, con
sumes by himself, by his menial servants,

by his parasites, the national productions

of the first necessity. So far agriculture

profits by his expenditure: but his pride

and effeminacy employ, to provide him

with lodging, with furniture, with cloth
ing and equipage, the assistance of all the

arts that are naturalized in France; it is,

then, the men of large fortune who fur
nish the natural aliment of French in
dustry." *

In Paris, (as, under such circumstances, our theory would lead us to expect,) those who

^{* &}quot;Le riche oisif consume par lui-même, par ses valets, par "ses parasites, les denrées nationales de première necessité. "L'agriculture profite evidemment de ces dépenses; le faste "et la mollesse, empruntent pour le loger, le membler, le vêtir, "le voiturer, le secours de tous les arts naturalisés en France; "il est donc l'aliment propre de l'industrie Françoise."— Ephémerides du Citoyen, l'om. II. 1766, p. 133.

excelled as hair-dressers, as tailors, as milliners, the most expert hands employed in painting china or carriages, and in cutting or setting diamonds, embroiderers of clothes and furniture, &c. received encouragement certainly equal, if not superior, to those employed in the same line in London; whilst we are told by Mr Arthur Young, that, from the information he could collect during his residence in different parts of France, country labour was 76 per cent. cheaper there than in England.

This sufficiently shows, that the demand for country labour, in proportion to the number of labourers of this description, was much inferior to what it is in this country; and that the proportion betwixt the demand for, and the number of, those

^{*} Country labour being 76 per cent, cheaper in France than in England, it may be inferred, that all those classes that depend on labour, and are the most numerous in society, are 76 per cent, less at their case, (if I may use the expression,) worse fed, worse clothed, and worse supported, both in sickness and in health, than the same classes in England, notwithstanding the immense quantity of precious metals, and the imposing appearance of wealth in France.

whose professions are calculated to administer to the desires of the affluent, even though their number was much greater, must have been equal, nay, superior, to what it is in England.

But we know, that when the interest of men engages their attention to the formation or manufacture of any class of commodities, the alertness and dexterity in supplanting labour by capital, which practice generates in any particular branch of manufacture, uniformly lowers the price, at the same time that it improves the quality, of the articles produced.—" For it is so plain, "that every man profiteth in that he most intendeth, that it needeth not to be stood upon. It is enough to point at it." *

Accordingly, to establish the comparative superiority, excellence, and cheapness, of all articles in France which contribute to the splendid decoration either of the persons, the tables, or the apartments of men of fortune, we need only appeal to

^{*} Bacon's Essays, p. 83.

those who have resided there, and who have enjoyed the society of the people of that country.

Even in England, no one can go into the drawing-rooms of the affluent, or attend St James's on a birth-day, without seeing this superiority sufficiently displayed, by the quantity of French manufactures exhibited, notwithstanding the severest legal prohibitions, and those, too, enforced by the example of the Sovereign.

On the other hand, to prove the superiority which England displays in the neatness and cheapness of all those articles which administer to the comforts of life, and which are within the reach of those who possess merely a competency; it is only necessary to call for the testimony of any man who has even passed through the two countries. The neatness of the houses in and around London, and the splendour of the hotels in Paris, have constantly formed themes of remark to all travellers.

What is universally matter even of loose observation among mankind, where interest

does not dictate the sentiment, is generally true, and may almost always with certainty be relied upon. Here, however, it is unnecessary to trust merely to such a source of information. For the effects of the distribution of wealth on the respective industry of the two countries, is no where more strongly displayed than in the documents and memorials which the negotiation for a commercial treaty called forth; and as this was evidently an occurrence calculated to interest the Government of both countries. in acquiring the most accurate knowledge of the subject, they seem to furnish a source of information which may with confidence be depended upon.

From these it would appear, that when the commercial treaty between France and England was adjusted, in the year 1786, those who conducted it, as well as those who were consulted on the subject, uniformly conceived, that France had a decided advantage in the manufacture of every thing for which affluence dictates a desire; and that England, on the contrary, ex-

celled in the formation of all those articles which administer to the comfort of such as enjoy but a moderate degree of wealth. *

* See Appendix, No. XIV. containing extracts from various papers and memorials, written at the time of the commercial treaty with France, 1786.

From these it appears,

- 1. That, in the article of cloth, the fine cloths of France were preferable to the fine cloths of England; whilst, on the other hand, it was conceived, that the lower-priced cloths of England could meet with no competition either for quality or cheapness.
- 2. That, though France had a most decided superiority in the manufacture of rich silks, England was supposed to have the advantage in making of ribbons, stuffs mixed with silk, &c. &c.
- 3. That, in the article of linens, the superiority that France enjoyed was solely confined to the cambrics and finer sorts.
- 4. That, in articles of millinery, and things for the personal decorations of the luxurious, France had an undoubted pre eminence.
- 5. That, in the manufacture of glass, the superiority of France in making of looking-glasses, was as decided as that of England in the formation of common glass, and of articles of crystal for general use.
- 6. That the china of France enjoyed an undisputed superiority; whilst the potteries and earthenware of England were considered as not to be rivalled.
- 7. That the superior taste and excellence, as well as the cheapness, of all articles of jewellery and silver-smith work in

To these illustrations, derived from contemplating the situation of the two nations in Europe, where manufacturing industry exists in the greatest state of perfection, it must be satisfactory to add proofs of the justice of the theory, drawn from the history of man in a very different stage of improvement.

Although the inhabitants of Mexico and Peru, before the Europeans penetrated into America, had attained a degree of civilization unknown to any of the other natives of that country, yet their progress in those arts which diffuse general opulence throughout a community was trifling, when compared to what was exhibited at this early period, even by the most uncivilized nations of Europe.

In both these countries, however, the right of property seems to have been perfectly understood, and established to its full extent, though a very marked differ-

France, was as decided as that of all articles of common hard-ware, the manufacture of England.

ence existed in the manner in which their landed property was distributed.

In Mexico, "every person who could be "denominated a freeman, had property in "land." *

There was also a numerous, a proud, and independent nobility; some possessed of princely, others of more limited fortunes, † and the Emperor was maintained by taxes on land as well as the acquisitions of industry.

In Peru, all the lands were divided into three shares; one was consecrated to the sun, and applied to the acquisition of decorations for their temples, and for what was requisite for celebrating the public rites of religion. Another was appropriated for the sole use of the Inca, or Prince of the Empire. The third was reserved for the subsistence of the people, among whom it was annually parcelled out: their possession only enduring for a year.

^{*} Robertson's History of America, Vol. II. p. 274. 4to edit.

⁺ Ibid. p. 280.

From these several distributions of property, our theory would naturally lead us to conclude, that, in Peru, the large and splendid fortunes of the Inca and the Church, and the limited provision of the people, must tend to encourage the arts calculated to satisfy the fancy, and please the taste of the luxurious, and comparatively to discourage those destined to form the more common objects of comfort. Whilst, in Mexico, it would teach us to expect, that the encouragement which demand creates could not have been confined to the manufacture of things of ornament or curiosity; that it must, on the contrary, have been of a nature more general, extending itself to those arts which produce articles of convenience and utility.

Accordingly, to such a degree are our expectations realized, that, in Peru, it appears there was no complete separation of professions, except in the case of artists employed "in works of mere curiosity or ornament, and that the crafts of common and "most necessary use in life were exercised

"by every Peruvian indiscriminately." *
Whilst in Mexico, the functions of the mason, the weaver, the goldsmith, the painter, and "of several other crafts, were carried on by different persons, and the separation of the arts necessary in life took place to a considerable extent." †

In reality, the distribution of wealth not only regulates and directs the channels in which the industry of every society is embarked, in such a manner as to decide upon the nature, condition, and quality of what is produced, but even in a great degree determines the progress of population throughout the world.

If it did not lead into a wider field than is consistent with the object of our present investigation, it would be easy to show, that as what a late ingenious author calls the positive check to population, (which he points out as common to man, with the rest of the animal and vegetable creation,) to wit, the want of nourishment, in reality arises

^{*} Robertson's History of America, Vol. II. p. 323.

⁺ Ibid. p. 276.

from the deficiency of the objects of man's desire, that is, of his wealth; so what he has called the preventive check to population, and which he deems peculiar to man, is in every society, and in all its forms, universally to be traced home to the distribution of wealth. *

* "The preventive check is peculiar to man, and arises " from that distinctive superiority in his reasoning faculties, "which enables him to calculate distant consequences. Plants "and animals have apparently no doubts about the future support " of their offspring. The checks to their indefinite increase, there-" fore, are all positive. But man cannot look around him, " and see the distress which frequently presses upon those who 66 have large families; he cannot contemplate his present pos-" sessions or his earnings, which he now nearly consumes him-" self, and calculate the amount of each share, when, with " very little addition, they must be divided, perhaps, among " seven or eight, without feeling a doubt, whether, if he fol-" low the bent of his inclinations, he may be able to support "the offspring which he will probably bring into the world. "In a state of equality, if such can exist, this would be the " simple question. In the present state of society other con-" siderations occur. Will he not lower his rank in life, and be " obliged to give up, in great measure, his former society? "Does any mode of employment present itself, by which he " may reasonably hope to maintain a family? Will he not " at any rate subject himself to greater difficulties, and more " severe labour, than in his single state? Will he not be un-" able to transmit to his children the same advantages of education and improvement that he had himself possessed?

Thus, as it is the labour of man, whether performed with his hands or by capital, employed in augmenting the quantity, or in improving the quality, of the productions of nature, and in adapting them for consumption, that forms the means of increasing the wealth of mankind; so it is the distribution of wealth, which, determining the nature of demand, regulates the direction of labour, and distributes it in such a manner, as to cause a variety in the productions of industry, conformable to the wants and desires to which the habits created by the power of enjoyment give birth.

For the distribution of wealth not only decides on the character of manufacturing industry, but on the proportion betwixt the share of the labour of man which is

[&]quot;Does he even feel secure, that, should he have a large family, his utmost exertions can save them from rags and squalid

[&]quot; poverty, and their consequent degradation in the communi-

[&]quot;ty? And may be not be reduced to the grating necessity of forfeiting his independence, and of being obliged to the

[&]quot; sparing hand of charity for support?"—Essay on the Principles of Population, by J. R. Malthus.

directed towards increasing the quantity, and meliorating the quality, of the productions of nature, and the share which is occupied in giving form to the materials produced. When great inequality of fortune prevails, the demand for labour employed in giving forms adapted to the taste of the luxurious and the rich, encourages that species of industry; whilst the extreme poverty of those who look for little beyond the necessaries of life, occasioning no increase of demand for things of this class, affords little encouragement to labour employed in augmenting the quantity, and meliorating the quality, of the productions of nature, and no inducement to improvement in that line of industry.

Nothing can more clearly illustrate this position, than a comparative view of the agriculture of France and England. The flourishing state of agricultural labour in England has long been a general topic of admiration; whilst we are told by the ingenious author of the articles Fermier and

Grain, in the Encyclopédie, * that in France, out of thirty-six millions of acres under the plough, thirty millions are cultivated by tenantry who are so poor, that the landlord is obliged to furnish labouring cattle and seed, and often even to advance money, till the first harvest, for payment of the expences of the farmer's living, and of his farming instruments. †

On the principles here stated, the causes of deficiency in any particular line of industry may in every country be easily discovered, by an examination into the distribution of the property of its inhabitants, and this appears to be all that is useful or

^{*} M. Quesnay.

[†] See Appendix, No. XV. containing, 1. Descriptions extracted from the Ephémerides de Citoyen, which give an idea of the situation of lands cultivated by metoyers, under the culture practised, as Quesnay supposes, on thirty millions of acres of the arable land of France. 2. A statement of the annual expenditure on one farm, and of the annual produce of another, in the Carse of Gowrie, in Scotland; to which is added, an account of the production of that district.

By contrasting these statements, the reader will see how much the wealth of a nation depends on the direction of its industry.

necessary. Any attempt to state the precise distribution of wealth which tends most to encourage the production of wealth, would be liable to the same criticism that the author of the Wealth of Nations has made on that table or formula, which the economists presented to the world as accurately displaying the order of expenditure most advantageous for a community. Dr Smith has truly said, that, as there are many regimens under which the human body enjoys health, so a country may enjoy, to a certain degree, prosperity under very different circumstances.*

In general, however, it may be observed, that great inequality of fortune, by impoverishing the lower orders, has every where been the principal impediment to the increase of public wealth. We know from experience, that no country of equal extent ever enjoyed so much wealth as what is diffused over this island. We have a right, therefore, to conclude, that the dis-

^{*} Wealth of Nations, Vol. II. p. 271. 4to edit.

tribution of property has been more favourable to the growth of wealth in this than in any other country. In the beginning of the seventeenth century, Lord Bacon, accounting for the advantages obtained by the English in their wars with France, ascribes them chiefly to the superior ease and opulence enjoyed by the common people; * and it certainly appears, that, with still greater confidence, the superiority of wealth we enjoy may be ascribed to the same cause.

* " Let states that aim at greatness, take heed how their of nobility and gentlemen do multiply too fast; for that ma-66 keth the common subject grow to be a peasant and a base 66 swain driven out of heart, and in effect but a gentleman's " labourer; even as you may see in coppice-woods. If you " leave your stadles too thick, you shall never have clean " underwood, but shrubs and bushes. So, in countries, if the gentlemen be too many, the commons will be base: and you will bring it to that, that not the hundredth poll will be fit for a helmet; especially as to the infantry. which is the nerve of an army; and so there will be great cc population and little strength. This which I speak of has 66 been no where better seen, than by comparing of England " and France; whereof England, though far less in terri-66 tory and population, hath been, nevertheless, an over match. " in regard the middle people of England make good soldiers, "which the peasants of France do not."-Lord Bacon's Essays, p. 80. See also his Life of Henry VII.

The wealth of mankind, it has been observed, * can alone be increased:—

- 1. By labour, whether personal or performed by capital, employed in increasing the quantity, and meliorating the quality, of the objects of his desire; that is, by agriculture.
- 2. By labour, whether personal or performed by capital, employed in giving form to, and adapting commodities for, consumption; that is, by manufacturing industry.

The superior efficacy of the application of capital, for the purpose of executing every branch of labour, over the most improved manual dexterity, has also been explained; and the degree in which the increase of public wealth is dependent on this circumstance, has been illustrated and made manifest. †

It becomes, therefore, of the greatest importance to remark, that, though the channels of expence of men of large and

^{*} See page 273. + See page 277, &c.

extended fortunes, that instil a desire for articles of taste, are often as unbounded as the fanciful imagination of those who administer to the satisfaction of their caprices; yet their habits cannot possibly suggest expenditure, for the purpose of supplanting labour they are never called on to perform. On the contrary, the habits of a man possessed of small fortune, which adds to those comforts his industry enables him to acquire, naturally suggest the desire of supplanting the labour he performs, whilst he finds, in his moderate wealth, means of executing that which benefits himself, and enriches the community to which he belongs.

The description of Montesquieu of the nobility of France, as living on their capital, might with justice have been extended to those frequenters of all courts who are born to inherit large fortunes; for the real source of increasing wealth is alone to be found amongst farmers, manufacturers, merchants, whose habits open their eyes to farther means of supplanting the labour

they perform or superintend, and which their small, but increasing fortunes, enable them to execute, with benefit to their private, and with still greater advantage to the public fortune.

How different, in its effects, is this real source of increasing opulence from parsimony, which has been falsely held out as the active means of extending public wealth. By parsimony, it has been made evident, that capital, or the means of performing labour, is increased at the expence of abstracting a part of what would be expended in consumable commodities, which must, of course, diminish the demand for labour employed in producing and giving form to articles of consumption, whilst the power of executing it is increased. But the industrious farmer or manufacturer, who discovers new modes of supplanting or performing labour, and finds in his small fortune the means of establishing them in practice, procures for himself a greater profit, and, at the same time, furnishes the public with the commodity in which he deals at a cheaper rate.

Whilst, therefore, he adds his augmented profit to his capital, there remains the same sum as usual, for the expenditure of his family in consumable commodities; and his customers having got the article he produces cheaper, must have a larger portion of their revenue than formerly, to apply to the acquisition of other articles of consumption.

By this means capital is increased, not (as by parsimony) at the expence of diminishing the means of consuming; for the augmentation of both is affected by the same operation, and the society acquires the power of executing an increased quantity of labour at the moment the means of consuming, and, consequently, the demand for labour, is augmented.

Thus the distribution of wealth not only regulates and decides the channels in which the industry of every country is embarked, and, of course, the articles in the production of which it excels; but a pro-

per distribution of wealth insures the increase of opulence, by sustaining a regular progressive demand in the home market, and still more effectually, by affording to those whose habits are likely to create a desire of supplanting labour, the power of executing it. *

* Though we do not recollect any attempt to show why the opulence of the lower orders tends to accelerate the growth of national wealth, or any reasoning to prove that it must have that effect; yet the fact (as appears from the following extracts) has not escaped the observation of the learned and ingenious.

"The advice of King Henry VII. (whereof I have spoken largely in the History of his Life) was profound and addinardle in making farms and houses of husbandry of a standiard; that is, maintained with such a proportion of land unto them, as may breed a subject to live in convenient plenty, and no servile condition; and to keep the plough in the hands of the owners, and not mere hirelings. And thus, indeed, you shall attain to Virgil's character, which he gives to ancient Italy.

"Terra—potens armis atque ubere glebæ."

Bacon's Essays, p. 81.

[&]quot;Above all things, good policy is to be used, that the trea"sure and monies in a state be not gathered into few hands.
"For, otherwise, a state may have a great stock and yet
"starve. And money is like muck, not good except it be
"spread."—Bacon's Essays, p. 39.

Whether a people can be called poor, when the common

Neither are these the only means by which a wise and fortunate distribution of wealth tends to produce an increase of the wealth of a country; for when, in consequence of the mode in which wealth is distributed, industry is once embarked in the production and formation of particular commodities, and dexterity is acquired in preparing for the market things for which the distribution of the growing wealth of colonies and other countries create a desire; a new and increasing demand encourages and sustains an extension of production greater than the wealth or the wisest distribution of wealth in any country, isolated and cut off from all communica-

[&]quot;sort are well fed, clothed, and lodged?" Querist, by the Bishop of Clayne.

[&]quot;Quand le commerce est en peu de mains, on voit quelques fortunes prodigieuses est beaucoup de misère; lorsqu' enfin

[&]quot; il est plus étendu, l'opulence est générale, les grandes for-

[&]quot;tunes rares."—"When commerce is in few hands, one sees of some very large fortunes in the midst of general poverty;

but when it gets into a greater number of hands, we see

[&]quot;" but when it gets into a greater number of hands, we see "general opulence, and few large fortunes."—Discours de

M. De Voltaire, à sa reception à l'Academie Française.

tions with others, could either authorize or maintain.

For skill in the means of supplanting and performing labour by capital, which habit creates, and the power of executing it by the possession of capital, at all times insures to countries practised in different branches of industry, means of furnishing the commodities for which growing opulence creates a desire, at a cheaper rate than they can be manufactured in a country where either the progressive increase of wealth, or a sudden change in the distribution of it, has given birth to new desires.

It must be observed, too, that this new source of demand, as it creates an augmentation of production, and consequently of wealth, instils into the inhabitants of the country, advanced in any peculiar line of industry, new desires, which in return create a demand for things that the climate or soil of the society rising in opulence enables them exclusively to produce, as well as for things that the habits of indus-

try, and the soil and climate of a society in which the distribution of property is altered, enables them to produce, of a better quality, and at a cheaper rate.

It is thus that commerce, though not a means of increasing wealth, must be considered as the cause of increased industry; for, by promoting an interchange of commodities betwixt two countries, it becomes a most powerful agent in extending the demand for the manufactures of each, enriching the one and the other, by exciting a quantity of industry that would otherwise have remained dormant; but which, when thus brought into activity, augments the productions of both.

To the economists (who maintained that value in exchange is the basis of all wealth, * that the increase of price is the increase of wealth, and that the riches of a country augment in proportion as the exchangeable value of its commodities in-

^{*} Philosophie Rurale, p. 60

creases) * commerce ought to have appeared a direct means of increasing wealth. A demand, on the part of England, for two thousand pounds worth of any particular French wine, as it must alter the proportion betwixt the demand for, and the quantity of it, must increase the value of the whole of that sort of wine. In like manner, a demand on the part of France, for two thousand pounds worth of English cloth in return, must alter the proportion betwixt the demand for, and the quantity of it, in such a manner, as to increase the total value of that commodity.

It is impossible, therefore, to discern how the disciples of Quesnay, who regarded exchangeable value as the basis of wealth, should not have considered commerce, which thus increases the value of the commodities of both countries, as a means of increasing wealth.

Yet this sect of philosophers, uniformly

^{*} Physiocratie, p. 116.

excluding from their view the effect which increase of demand must have in augmenting the exchangeable value of the goods of all countries, amongst which a commercial intercourse exists, and confining all their views of commerce to the mere act of exchange, have obstinately repeated throughout their writings, in forms innumerable, that commerce is only an exchange of equal value, for equal value. *

If wealth, however, has been properly considered as consisting in the abundance of the objects of the desires of mankind; if exchangeable value has been with propriety regarded merely as the means by which, in civilized society, mankind express their preference for the various productions of human industry, and thus regulate the channels in which it is embarked; commerce cannot with consistency be stated as a direct means of producing, and, of course, it cannot be deemed a means of

^{*} See Dialogues sur le Commerce et sur les Travaux des Artisans, by Quesnay. Printed in Physiocratie.

increasing wealth. It must, however, appear, in a state practised in the various branches of labour, to be the great cause of putting the means of increasing wealth into action.

It is from this circumstance that the wealth of a country, in these days when the commercial relations of nations extend themselves over the globe, no longer depends alone on the internal distribution of its wealth; and that the progress of wealth is now accelerated or retarded, in proportion as the distribution of the growing wealth of rising countries, or changes in the distribution of wealth in societies that have been long established, give birth to a great or small demand for the commodities in the production of which, in consequence of the internal arrangement of its own wealth, a country has been long practised.

It is only necessary to view the nature of the British manufactures for which America furnishes a demand, to be convinced, that the encouragement to British industry, afforded by demand from the United States, must have been comparatively small indeed, had that country been universally cultivated by slaves, and parcelled out into estates productive of large incomes, such as our West India colonies exhibit. On the other hand, the advantages that French industry would have derived from such an arrangement of American property, are at once suggested, by resorting to the drawing-rooms, viewing the clothing, and considering the expenditure, even of the British West India planter.

If, in the changes which have taken place in the distribution of European property, we had perceived (instead of a tendency to break down properties, and to emancipate from personal slavery, as well as from slavish tenures) a gradual accumulation of wealth into large masses, and a greater proportion of the lower orders reduced into a state of perfect slavery; the encouragement British industry would have derived from European demand must have been very different from what has been ex-

perienced, even under all the turbulent events that have distinguished modern times.

This view of the circumstances on which the progressive wealth of European nations at present depends, must afford matter of great consolation to every man who is seriously concerned for the prosperity and aggrandizement of the British Empire.

For, if it could be allowed to enjoy peace and tranquillity, there never was a period in which the property of mankind seemed almost universally to be getting into an arrangement that insured a similar extension of demand for the produce of the peculiar species of industry in which any one country by practice excelled.

And this flattering prospect, however much it may excite the envy of other European nations, cannot, with reason or with impunity, induce them to abstain from, or throw impediments in the way of, commercial communication with us.

For, on the principles here stated, it is

obvious, that commerce cannot exist betwixt any two countries, without equally exciting the industry of both. No means can be devised of *interchanging commodities* that will exclusively encourage the industry of any one of the parties concerned; and the foolish objections to commercial communication, that ignorant jealousy suggests, must ever retard the progress of the industry of a country that makes them, as effectually as that of the country, against the increase of whose industry they are levelled.

Great Britain cannot exclude the laces and cambrics of France, without obliging the consumers of those articles, throughout the British dominions, (in consequence of the necessary rise of price,) to appropriate more goods to the purchase of these commodities; less must of course remain for the acquisition of other things in the home market. Further, such a prohibition necessarily abstracts a demand, to the amount of the value of the lace and cambric, from those commodities, in the ma-

nufacture of which, practice has given England peculiar dexterity, which France must have desired in return; for no degree of freedom in commercial communication can ever convey goods from one country to another, without an equivalent.

France, on the other hand, cannot exclude the hardware of Birmingham, or the cloth of Leeds, without making the natives of that country appropriate more commodities to the purchase of hardware and coarse cloth. This of necessity abstracts a portion of what would be employed in acquiring other objects of internal industry; besides which, a demand to the amount of the value of the hardware and cloth must, by this means, be withdrawn from the acquisition of articles of French growth and manufacture, which England would require in return.*

^{*} The clamour made in France against the Commercial Treaty in 1787, must have been excited by the industry of a few interested individuals; for it is impossible that that country should not have derived equal benefit with England from the intercourse.

Even the increase of price of any foreign commodity, occasioned by taxation, is justly regarded by the author of the Wealth of Nations as prejudicial to domestic industry; for he truly observes, that "the "dearer the Birmingham manufacturer "buys his foreign wine, the cheaper he

The following extract, from the seventh *Mémoire* of M. Boyetet, Director of Commerce in the years 1787 and 1788, shows the amazing increase of demand for wines that took place immediately after the Treaty of Commerce.

- "Les états qu'on a de la sortie des vins de Bourdeaux pour "l'Angleterre et l'Irclande, dans les six premiers mois de cette année, portent deux mille sept cent cinquante tonneaux de vin.
- " Ceux des six derniers mois de l'année 1786, portent mille " cinq cent quatre-vingt-trois tonneaux.
- "Il en résulteroit une augmentation de sortie dans les six "premiers mois de cette année, de mille cent soixante sept "tonneaux de vin de Bourdeaux."
- "The account of wines exported from Bourdeaux to England and Ireland, in the first six months of this year, states
 it to amount to two thousand seven hundred and fifty hogsheads.
- "In the last six months of the year 1786, there appear to have been only one thousand five hundred and eightythree hogsheads exported.
- "It follows, then, that in the first six months of this year, "there has been an increased exportation to the amount of "one thousand one hundred and sixty-seven hogsheads of "claret."

" necessarily sells that part of his hardware, " with which, or, what comes to the same "thing, with the price of which he buys "it: That part of his hardware, therefore, "becomes of less value to him, and he has " less encouragement to make it. " dearer consumers in any one country pay " for the surplus produce of another, the " cheaper they necessarily sell that part of "their own surplus produce, with which, " or, what comes to the same thing, with "the price of which they buy it. That " part of their own surplus produce be-"comes of less value to them, and they " have less encouragement to increase its " quantity." *

Impediments, therefore, to commercial communication, whether by prohibitions or taxation, must ever retard the growing opulence of mankind, as much by discouraging the industry of the country whose folly occasions them, as by any effect they can have on the industry of the country

^{*} Wealth of Nations, Vol. II. p. 514. 4to edit.

they are meant to injure. The quibbling policy of commercial negotiators, who falsely and ignorantly pride themselves on taking advantage of each other, ought alone to create the contempt it merits; for human ingenuity cannot contrive a means of conducting the commercial relations betwixt any two countries, that does not alike promote the prosperity of both.

If, in delineating the means and the causes of the progressive increase of wealth, we have been fortunate enough to impress conviction, it will follow:—

That man owes his wealth, or the accumulation of the objects of his desire, which he alone of all animals possesses, to the power of directing his labour to the increasing of the quantity, or the meliorating of the quality, of the productions of nature; and to the power of supplanting and performing labour by capital;—faculties peculiar to, and characteristic of, the human species:—

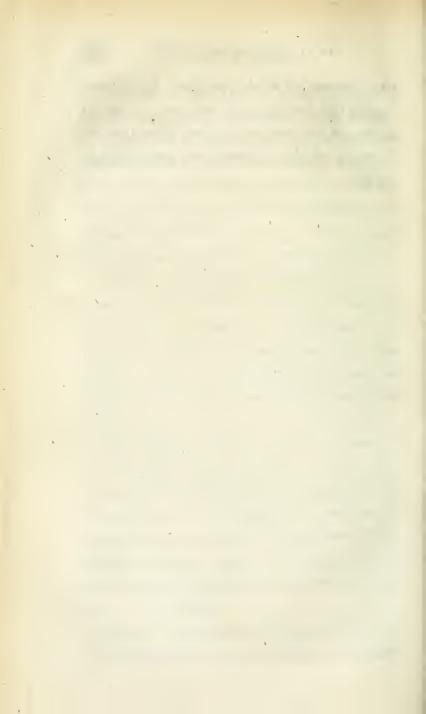
That though land, labour, and capital, may be regarded as the sources of wealth,

the wealth of mankind is alone increased by labour, whether performed by the hand of man or by capital, employed in increasing the quantity, and meliorating the quality, of the productions of nature; and by labour, whether manual or performed by capital, employed in giving form to, and adapting raw materials for consumption:—

That the direction which labour in every country takes, and of course the channels of industry in which it excels,—nay, the extent to which the exertions of its industry, and even its population, can be pushed, depend upon the distribution of its wealth:—

That when once the peculiar character of the industry of a country is, by this means, fixed and decided, the progress of its opulence is accelerated or retarded in proportion as the distribution of wealth in other countries creates a demand for the articles, in the production of which it excels. And, lastly:—

That all impediments thrown in the way of commercial communication, obstruct the increase of wealth, as much by discouraging the industry of the country which gives rise to them, as by their effects on the industry of the country they are meant to injure.



APPENDIX.



APPENDIX.

No. I. (Page 48.)

"IL faut distinguer les biens d'avec les richesses. Ceux-là ont une valeur usuelle, et n'ont point de valeur vénale. Celles-ci ont une valeur usuelle et une valeur vénale. Il ne suffit pas à une nation d'avoir des biens. Il faut qu'elle tende à se procurer de grandes richesses, pour subvenir par le commerce à tous les besoins différens des membres dont elle est composée."—Physiocratie, p. cxviij.

No. II. (Page 110.)

THE system which regards commerce as the sole source of wealth, was long maintained by most

of the eminent men who treated on commercial subjects; as the following extracts (to which many others might be added) sufficiently show.

"It is a general opinion, that the trade of England was never greater, and it may be true, that if it be so, yet it will not absolutely conclude, that the kingdom doth increase in riches; for the trade may be very abundant, and yet by consumption and importance of more than is exported, the stock may waste.

"The balance would be a true solution of the question, if it could be rightly had: but by reason it must be made up by a medium of the books of rates, it will be very uncertain.

"Therefore we must seek another rule that is more sensible, upon which we may all judge, and that may be by the plenty or scarcity of money; for it is a true rule, if money increase, the kingdom doth gain by trade; if it be scarce, it loseth."—Sir Thomas Roe's Speech in Parliament, 1640.

"Those trades may be esteemed good, which consume our products and manufactures, upon which the value of our land and employment of the poor depends; that increase our seamen and navigation, upon which our strength depends; that supply us with such commodities as

we absolutely want for carrying on our trade, or for our safety, or carry out more than they bring in, upon which the increase of riches depends.

"On the contrary, those that import more than they export, or bring us in goods perfectly manufactured, or any sort of goods that hinder the expence of our own, or that carry our wool. or other materials, to enable foreign nations to make manufactures, to be spent in the room of our own; or bring in commodities that are not of necessary use, but tend to increase idleness and luxurious expences; or are carried on by foreign bottoms, or factors or merchants that are foreigners, (not so advantageous as when carried on by our own ships and people;) or trades carried on by the exportation of coin or bullion. Such heads as these may serve as a touchstone for the examination of trades."—A Discourse of Coin, Trade, and Paper Credit, p. 58. 1697.

"Although a kingdom may be enriched by gifts received, or by purchase taken from some other nations, yet these are things uncertain, and of small consideration when they happen. The ordinary means, therefore, to increase our wealth and treasure is by foreign trade, wherein we must ever observe this rule, to sell more to strangers yearly than we consume of theirs in

value. For suppose that when this kingdom is plentifully served with the cloth, lead, tin, iron, fish, and other native commodities, we do yearly export the overplus to foreign countries, to the value of twenty-two hundred thousand pounds; by which means we are enabled beyond the seas to buy and bring in foreign wares for our use and consumption, to the value of twenty hundred thousand pounds. By this order duly kept in our trading, we may rest assured, that the kingdom shall be enriched yearly two hundred thousand pounds, which must be brought to us in so much treasure; because that part of our stock which is not returned to us in wares, must necessarily be brought home in treasure."-England's Treasure by Foreign Trade, by Thomas Mun, p. 7.

"That the greatness of this kingdom depends upon foreign trade, is acknowledged, and therefore the interest of trade not unbecoming persons of the highest rank; and of this study, as well as others, it may be said, there is an infinity in it; none, though of the largest intellects and experience, being able to fathom its utmost depth.

"Among other things relating to trade, there has been much discourse of the balance of trade;

the right understanding whereof may be of singular use, and serve as a compass to steer by, in the contemplation and propagation of trade for public advantage.

- "The balance of trade is commonly understood two ways:
- " 1. Generally,—something whereby it may be known whether this kingdom gains or loses by foreign trade.
- " 2. Particularly,—something whereby we may know by what trades this kingdom gains, and by what trades it loses.
 - " For the first of these:
- "It is the most general received opinion, and that not ill-grounded, that this balance is to be taken by a strict scrutiny of what proportion the value of the commodities exported out of this kingdom bear to those imported; and if the exports exceed the imports, it is concluded the nation gets by the general course of its trade; it being supposed that the overplus is imported in bullion, and so adds to the treasure of the kingdom, gold and silver being taken for the measure and standard of riches."—A Discourse of Trade, by Sir Josiah Child, p. 163 and 164.
- " If we export any value of our manufactures for the consumption of a foreign nation, and im-

port thence no goods at all for our own consumption, it is certain the whole price of our own manufactures exported must be paid to us in money, and that all the money paid to us is our clear gain.

"The merchant, perhaps, does not get 20 per cent. by the goods he sends abroad; yet if he sells his goods for the very price he paid for them, and brings back the whole price in money, and not in goods, to his native country, the merchant, in this case, gets nothing, but his country gets clear the whole value of the goods."—The British Merchant, p. 23.

"If we have at any time imported from France (for our own consumption) a greater value of goods and merchandises than we exported for the consumption of that country, it is certain, that, one way or other, we paid the balance in money; and whether we paid this by exporting bullion out of England, or by drawing bullion from other nations indebted to us, into France, the case is the very same; that whole balance was so much loss to this kingdom; so much we may be said to have lost by our French commerce."—The British Merchant, p. 34.

No. III. (Page 193.)

"Nous entendons par papiers de crédit, toute créance, ou obligation; en un mot, toute stipulation par écrit entre un débiteur et un créancier ou porteur de créance, qui oblige celui-là à payer, et autorise celui-ci à exiger une valeur, et qui pouvant être cédée et transportée, devient un moyen de transporter la propriété, de ces valeurs, d'un possesseur à un autre possesseur, sans transporter les valeurs en nature.

"On voit que cette définition convient à tous les papiers, billets, actions des banques; aux créances qui représentent des valeurs empruntées par les gouvernemens, ou des fonds d'entreprises de commerce, de finance, &c. et enfin, aux créances mêmes de particulier à particulier; telles que les lettres de change, promesses, billets à ordre," &c.

No. IV. (Page 236.)

COMPUTATION OF INCOME BY MR PITT.

		Deduction for part under L. 60, which will pay nothing, and part under L. 200, which will pay an average $\frac{1}{50}$.	Taxable Income.
Landlords' rents,	L.	L.	L.
40,000,000 culti-			
vated acres, esti-			
mated at 12s. 6d.	25 000 000	1 5 000 000	20 000 000
per acre, Tenants' rents at	25,000 , 000	$\frac{1}{3}$ 5,000,000	20,000,000
$\frac{3}{4}$ ths, -	19,000,000	§ 13,000,000	6,000,000
Tithes, -	5,000,000	$\frac{2}{3}$ 13,000,000 $\frac{1}{5}$ 1,000,000	
Mines, navigation,			
and timber,	3,000,000	1 000 000	3,000,000
Houses, - Rents on inhabited	6,000,000	$\frac{1}{5}$ 1,000,000	5,000,000
houses 4,500,000			
Professions, -	2,000,000		2,000,000
Scotland 1th of Eng-	1		
land, -	5,000,000		5,000,000
Income from profes-	* a00 a00		2000 000
sions beyond sea, Interest on funds	5,000,000		5,000,000
after deducting			
sums issued to			
Commissioners as			
sinking fund, and			
interest of capital		1 2 000 000	10,000,000
redcemed, - Profit on foreign	15,000,000	$\frac{1}{5}$ 3,000,000	12,000,000
trade, supposed	1		
15 per centum or			
L.80,000 000 ca			
pital insured,	12.000,000		12,000,000
Ditto, home trade at 15 per cent.	18,000.0007		
Other trade, -	10.000.000		28,000,000
		1	102.000.000

See Appendix, No. 4, to the Substance of a Speech by Lord Auckland, printed by authority, 1799. To the same purport, see Appendix, No. 7, of Mr Rose's Examination, &c.

No. V. (Page 240.)

The Testament of M. Fortuné Ricard, &c. translated from the French by Dr Price.

"In the name of God, I Fortune Ricard, teacher of arithmetic at D—, invoking the Holy Virgin, and St. Fortune my patron, do make this my last will as follows:—

["The executors, who have caused this will "to be printed, in order to fulfil the intentions "of the late M. Fortuné Ricard, do not think "it necessary to publish those particular be-"quests which concern only his own family. "After having disposed of his patrimony a-"mong them with wisdom, he proceeds in the "following manner:"]—

"It remains for me now to declare my intentions with regard to the promise of 500 livres, (L. 22, 4s. 6d.,) subscribed on my behalf by M. P., banker of this town. This sum proceeded originally from a present which was made me by Prosper Ricard, my much honoured grandfather, when I entered the eighth year of my age. At that age he had taught me the princi-

ples of writing and calculation. After having shown me, that a capital, with its accumulating interest at 5 per cent., would amount, at the end of one hundred years, to more than one hundred and thirty-one times the original sum; and, seeing that I listened to this lecture with the greatest attention, he took 24 livres out of his pocket, and addressed me with an enthusiasm which is still present to my mind. "My child," said he, " remember, while thou livest, that, with eco-" nomy and calculation, nothing is impossible "for man. Here are 24 livres, which I give "thee. Take them to a merchant in our neigh-"bourhood, who will place them in trade out of "regard to me. Every year thou shalt add the "interest to the principal. At thy death, thou " shalt employ the produce in good works for "the repose of thy soul and my own." I have executed this order with fidelity; and, in the course of my life, I have planned many projects for employing this money. Having reached the seventy-first year of my age, it amounts to 500 livres; but, as I must, some time or other, set bounds to myself, I now desire that it may be divided into five portions, of 100 livres each, to which the interests shall be annually added,

and the accumulated sums shall be successively applied to the following uses:—

- " 1. In a hundred years, the first sum of 100 livres will amount to more than 13,100 livres, (L. 5822.) From this sum, a prize of 4000 livres shall be given for the best theological dissertation, to prove the lawfulness of putting out money to interest. Three medals, of 600 livres each, shall also be given for the three dissertations which shall be adjudged the next in merit to the prize dissertation. The remainder of the 13,100 livres shall be expended in printing the prize dissertation, and extracts from the others. Copies of these shall be sent, gratis, to all the bishops, clergy, and confessors of the kingdom. I had intended to have sent them also into foreign countries; but I observe that all the universities of the Christian world, excepting those of France, have solemnly recognised the lawfulness of putting money to interest, and that it continues necessary only in this kingdom, to explain a question in morals, so interesting to the welfare of the state.
- "2. After two hundred years, a second sum of 100 livres, amounting, with its accumulated interest, to more than 1700,000 livres, (L.756,500,)

shall be employed in establishing a perpetual fund, for fourscore prizes, of 1000 livres each, to be distributed annually by the different academies of the kingdom, as follows: Fifteen prizes for the most distinguished virtuous actions; fifteen for works of science and literature; ten for solutions of questions in arithmetic and calculation; ten for such new processes in agriculture as shall produce the best crops; ten for masterpieces in the fine arts; and ten to encourage races and other exercises, proper to display the force and agility of the body, and to restore amongst us a taste for the gymnasium, which was in such great esteem among the Greeks, and which formerly made so many heroes.

"3. After three hundred years, from another sum of 100 livres, increased in that time to more than two hundred and twenty-six millions, (L. 10,057,000,) there shall be appropriated 196 millions, towards establishing, in the most considerable places in France, five hundred patriotic banks, for lending money without interest; the largest of which shall have a fund of ten millions of livres, and the smallest a fund of 100,000 livres. These banks shall be managed by a committee of the most upright citizens in each place, and the money shall be employed

in loans, to succour the unfortunate, or advanced towards promoting agriculture, trade, and industry. The remaining thirty millions shall be expended in founding twelve museums, in the cities of Paris, Lyons, Rouen, Bourdeaux, Rennes, Lisle, Nancy, Tours, Dijon, Thoulouse, Aix, and Grenoble. Each of these museums shall be placed at the most agreeable end of the city. Five hundred thousand livres shall be expended upon each building, and in the purchase of grounds which shall belong to them, and be laid out into botanical and fruit gardens, and also into kitchen gardens, and extensive walks. To each museum shall be annexed an income of 100,000 livres; and there shall be lodged and boarded in it forty literary men, and artists of superior merit, who, at the time of meals, shall be divided into four tables, that their repasts may be cheerful, without being too noisy. Each museum shall be provided with six secretaries, a designer and engraver, and four carriages. There shall be also a hall for concerts, a theatre, a chemical laboratory, a cabinet of natural history, a hall for experimental philosophy, and a grand gallery for a common library. A hundred thousand livres shall be expended on a separate library for each of these establishments. The same

sum shall be employed in providing them with separate cabinets of natural history, and with philosophical instruments. And 10,000 livres shall be reserved annually, for keeping up and increasing these cabinets and philosophical instruments.

"The libraries shall always be open to the public. Twenty members of the museum shall be engaged in giving public and gratuitous courses of lectures upon the foreign languages, and upon all the arts and sciences. The other twenty shall be engaged in such other employments as may be most useful. No one shall be admitted a member, till he has previously given proof, not of his rank, descent, or nobility, but of his morals, and of his never having dishonoured his pen, by writing against religion and government, or by sacrificing any member of the community. On being admitted, he shall make oath, "That he will prefer virtue, truth, and "his country, to every thing; and the general "good of literature to his own fame." The works of the members of the museum shall be printed at the expence of the establishment, and when those expences are reimbursed, the profits shall belong to the authors.

" 4. After four hundred years, the fourth sum

of 100 livres, amounting, with interest, to near 30,000 millions, (L. 1,330,000,000,) shall be employed in building one hundred towns, each containing one hundred and fifty thousand souls, in the most agreeable situations which can be found in France. The means of peopling these towns, of governing and making them flourish, are explained in a memorial annexed to this will. In a short time there will result from hence an addition of fifteen millions of inhabitants to the kingdom, and its consumption will be doubled; for which service I hope the economists will think themselves obliged to me.

"I am sensible that all the specie in Europe is not equal to these 30,000 millions, and that it will be impossible to make provision in money for such immense sums. For this reason, I leave it to the discretion of my executors to exchange cash at convenient seasons for landed and other real possessions. The revenue arising from those possessions shall either be laid out in cash, or realized by further purchases, so that my bequests may be fulfilled in their due time without any difficulty.

"I am convinced, by the most accurate calculations, that my arrangements, instead of clogging, will give activity to the circulation of specie. Laying out the money I have ordered in the purchase of estates, will soon increase their value; and when these accumulating riches shall have so produced their effects as that there can no longer be found in France a landholder who will sell his estate, purchasers must be sought for among the neighbouring nations.

"5. Finally, with regard to the last sum of 100 livres, amounting nearly, by the accumulation of five hundred years, to four millions of millions of livres, (one hundred and seventy-six thousands of millions Sterling,) it shall be disposed of as follows:

"Six thousand millions shall be appropriated towards paying the national debt of France, upon condition that the Kings, our good Lords and Masters, shall be entreated to order the Comptrollers General of the Finances to undergo in future an examination in arithmetic before they enter upon their office.

"Twelve thousand millions shall likewise be employed in paying the public debts of England. It may be seen, that I reckon that both those national debts will be doubled in this period; not that I have any doubts of the talents of certain ministers to increase them much more; but their operations in this way are opposed by an infini-

ty of circumstances, which lead me to presume, that those debts cannot be more than doubled. Besides, if they amount to a few thousands of millions more. I declare that it is my intention that they should be entirely paid off, and that a project so laudable should not remain unexecuted for a trifle more or less. I beg that the English would not refuse this slight mark of the remembrance of a man, who was indeed born a Frenchman, but who sincerely esteemed their nation, and always was a particular admirer of that magnificent work which Newton, their countryman, has entitled Universal Arithmetic. I earnestly desire, that, as an acknowledgment for this legacy, the English nation will consent to call the French their neighbours, and not their natural enemies; that they may be assured that nature never made man an enemy to man, and that national hatreds, commercial prohibitions, and, above all, wars, constantly produce a monstrous error in calculations. But I dare not in this instance require any thing. We must hope for all we desire from Time; and when we have the happiness of rendering a service, we must not destroy its value, by annexing conditions to it which may encumber those whom we wish to serve.

"Thirty thousand millions shall be formed into a fund, for producing an annual revenue of fifteen hundred millions, to be divided in times' of peace among all the powers of Europe. In time of war, the share of the aggressor or aggressors shall be given to those who have been attacked unjustly, in order to engage sovereigns, if possible, to reflect a little before they commence unjust hostilities. This revenue shall be distributed among the different nations in proportion to their population. Every ten years an exact numeration shall be taken, with a view to this distribution, which shall be made by a diet composed of deputies from all the different nations; but I direct that a larger proportion shall be distributed to those sovereigns who shall apply for it, and appear to desire it, with no other view than to encourage population among their subjects.

"I leave to the wisdom of my executors the care of extending the benefits of this bequest to the other parts of the world; and if, by this means, they should hope to succeed in extinguishing, throughout the world, the absurd and barbarous rage of war, I willingly consent that they appropriate for this purpose the further sum of one hundred thousand millions. I wish

that six thousand millions may be offered to his Majesty the King of France; namely, a thousand millions to supersede the necessity of lotteries, a sort of tax imposed upon wicked men, which infallibly renders them a great deal more wicked: a thousand millions to buy in all useless offices, which are attended with the sadinconvenience of persuading many persons that it is a sufficient discharge of their duty to their. country to occupy an office without function, and that an honour may be derived from bearing a senseless title; a thousand millions to buy in offices, which, on the contrary, are too important to be left exposed to the danger of venality; a thousand millions to purchase a domain for his Majesty, worthy of his crown, and. sufficient for the expences of his Court, so that the nation may clearly perceive, that the taxes imposed upon them are applicable only to the expenditures of the State. The remaining two thousand millions shall form a fund, whose annual produce shall be employed by his Majesty in pensions and gratuities. By these means, if, sometimes, those favours should be conferred upon intriguing and undeserving persons, the nation will have no cause to complain of the improper use of money, drawn from taxes and the labours of the husbandman.

"I appoint a thousand millions towards adding a thousand livres to the settled income of all the clergy in the kingdom, and six hundred livres to that of their vicars, upon condition that they no longer demand fees for saying masses. I had also some thoughts of proposing to them the suppression of fees for baptisms, marriages, and burials; but I have considered those functions to be of a civil as well as religious nature, and that, on this account, the clergy may, without impropriety, be allowed to receive a pay, which is, in fact, more moderate than would be required by any other public officers in their places. Besides, this pay perhaps renders the service more exact, more speedy on their part, and less irksome to the delicacy of some of those who receive it.

"I appoint two thousand millions towards forming an income of ten livres a month to all the children which shall be born in the kingdom, till they are three years of age; and I desire this legacy to be increased to thirty livres a month to those children who shall be nursed by their own mothers. I do not except even the children of the rich; on the contrary, I invite

rich parents to accept this donation without reluctance, as an honorary prize awarded to paternity and the cares of maternal love. They may, if they please, apply it to acts of charity and benevolence.

"I appoint four thousand millions towards purchasing the waste lands of the kingdom. These shall be divided into five hundred thousand little farms or tenements, of four or five acres each, on which shall be erected as many commodious cottages. These five hundred thousand farms shall be given as freeholds to an equal number of married peasants, chosen in each parish by a vestry composed of ten of the most aged inhabitants. The possessors of these freeholds shall be obliged to make them their only residence, to cultivate them with their own hands and those of their families, and to report every year the improvements of them which they have made. These freeholds shall be hereditary, but only upon condition that they shall neither be divided, nor any two of them engrossed by one person. When a freeholder dies, without leaving behind him either wife, children, brothers, sisters, nephews, or nieces, who have lived and laboured with him for three years prior to his decease, the freehold shall be

declared vacant, and given anew, by the vestry of the parish, to that peasant who shall appear to deserve it best.

"I desire that two thousand millions be laid out in purchasing all the manors of which there shall be sellers, and that the vassals thereon be for ever afterwards exempted from all servitude and fealty.

"Six thousand millions shall be employed in founding houses of education in all the country parishes, agreeable to the plan of the author of a work, entitled Patriotic Views respecting the Education of the People. If, in executing this plan of a man of genius, and an excellent citizen, it should appear to want some little amendments and alterations, I direct that they shall be adopted.

"I appoint twenty thousand millions towards erecting in the kingdom forty thousand houses of labour, or public workhouses; to each of which shall be appropriated from ten thousand to fifty thousand livres annual income. Every man and woman shall have a right to offer themselves at any time to be maintained and employed in them. I choose to say nothing of any other particulars in the government and management of these houses, hoping that the ideas which begin

to be formed concerning establishments of this kind, will be perfected before the period fixed for these shall arrive; and that it will at length be universally acknowledged, that though it is dangerous and foolish to give alms in money to a strong beggar, yet that society has no right to deprive him of his liberty, and inflict punishments upon him, while it does not hold out to him any other means of subsistence, or at least point out to him a method of discovering what means he is capable of using.

"I entreat the managers of these public work-houses to give the greatest encouragement to such trades as can be performed by women. This sex, so dear to all sensible minds, has been neglected or oppressed by all our institutions. Seductions of all kinds seem to conspire against their virtue. Necessity precipitates them involuntarily into an abyss of infamy and misery. The low price which is set upon the labour of women is out of all proportion to the inferiority of their bodily strength. Let the public work-houses set the example of paying them better.

"There are in France many houses of correction, where the misconduct of women is severely punished, but where, in reality, it is only suspended, mere confinement having no tendency to eradicate vice. Why should there not be one establishment, where a young woman, conquered by temptation, and on the brink of despair, might present herself, and say, "Vice offers me "gold; I only ask for labour and bread. In com-"passion to my remorse, assist and strengthen me. Open an asylum for me, where I may "weep without being seen, expiate those faults "which pursue and overwhelm me, and recover a shadow of peace." Such an institution exists no where. I appoint, therefore, a thousand millions towards establishing one.

"The snares which are laid by vice for women without fortunes, would make fewer victims if more assistance was given them. We have an infinity of establishments for persons in the higher ranks, of life, which do honour to the generosity of our forefathers. Why have we none for this purpose? I desire, therefore, that two thousand millions be employed in establishing in the kingdom a hundred hospitals, which shall be called Hospitals of Angels. There shall be admitted into each a hundred females, of the age of seven or eight years, and of the most engaging forms. They shall receive the most perfect education in regard to morals, useful know-

ledge, and agreeable accomplishments. At the age of eighteen they may quit the hospital, in order to be married, at which period they shall each be paid a portion of forty thousand livres. I mention this moderate sum, because it is my wish that they be neither reproached for want of fortune, nor espoused from interest. An annual income of two thousand livres shall be given also to their parents, * * * *. Except once in the year, at a solemn and splendid procession, they shall rarely appear in public, but shall be constantly employed in their asylum, in learning all that can render them one day excellent wives and mothers.

"In order to fit them, in particular, for domestic economy, I desire, that after they have been taught the most accurate ideas of expences of all kinds, questions be proposed to them from time to time, to which they shall be obliged to give answers by word of mouth, and also in writing; as for example: "If you had such and "such an income, under such and such circum-"stances, how much would you appropriate to "your table, your house-rent, your maintenance," and the education of your children? How "many servants would you keep? How much "would you reserve for sickness and unforeseen

"expences? How much would you consecrate to the relief of the unfortunate, and the public good? If your income depended either entirely or in part upon a transient advantage, or a place which was not assured to you, How much would you expend annually? What sum would you reserve for forming a capital?" &c. &c. Prizes publicly given to the best answers to questions of this kind would constitute, in my opinion, an exercise equally engaging, and more useful, than the little comedies and novels with which young persons in the higher stations are generally entertained.

"The honours conferred upon great men have always appeared to me the most effectual means of producing great men. I appoint, therefore, a thousand millions towards striking medals, and placing in the halls of all towns, or in any other convenient places, statues and busts in honour of such great men as shall hereafter rise up. I desire further, that these honours be not paid them till ten years after their decease, and that they be decreed and proportioned by a tribunal, composed of such upright, enlightened, and worthy citizens, as shall be most likely not to be dazzled by false virtues. It has been once reckoned, that founding hospitals for the sick is one of the

best public services. For some years, a conviction has been gaining ground, that breathing the pestilential air of hospitals doubles the danger of diseases, and that on this, and other accounts, they probably destroy more lives than they save. I desire, therefore, that ten thousand millions be employed in establishing, in each parish of the kingdom, houses of health, in which shall be maintained a physician, a surgeon, and a convenient number of sisters of charity, and nurses. These houses shall supply the sick gratis, in their own houses, with every assistance in food and medicine, and none shall be taken to the house of health excepting those whom it shall be impossible to assist at home.

"I have hitherto only directed the employment of about two hundred thousand millions. There remain still near four millions of millions, the appropriation of which I leave to the discretion of my executors. I wish them to purchase and pull down all such houses as incommode the public way in all towns; to multiply squares, quays, fountains, gardens, &c. in order to give salubrity to the air of towns; to empty ponds, to clear heaths; to deepen the beds of rivers, so as to render them navigable, and to unite them by means of canals. In a word, I wish them to

co-operate in every possible method with nature, which seems to have designed France to be the most delightful country under heaven.

"I hope that all good citizens will assist my executors in the choice of such useful establishments as shall yet remain to be formed. I call upon them to publish the ideas with which patriotic zeal may inspire them, since now they are encouraged by the consoling certainty, that funds for executing them cannot be wanting.

"I beg of them to meet as often as the affairs of my executorship shall require. In case of an equal division of opinions, the oldest shall have the casting vote. When one of them dies, I desire the survivors to fill the vacancy, as soon as may be, with the most honest, zealous, and disinterested citizen of their acquaintance, and to proceed in this manner for ever. I hope that during the first years of their executorship, when the operations of the fund will be easy, they will transact in this business out of regard to me and to the public. I foresee, that, in process of time,

the sums to be laid out will become so immensely great, as to render necessary voyages and other considerable expences, which will be productive of no profit. For this reason, I have left one hundred and twenty-five thousand livres of the second sum unappropriated; of the third, seven hundred and eleven thousand; and of the fourth, thirty-two millions. These sums I request them to accept, as a compensation for their expences and trouble. I charge them always, as far as they can, without hazarding the security of the fund, to prefer those ways of laying out the accumulating sums which shall be most serviceable to individuals and the public.

"If a reduction in the rate of interest, or any unforeseen losses, should injure the fund, so as to retard its increase, the execution of my desires need only be postponed, in proportion to the interruption that shall happen.

"May the success of these establishments cause one day a few tears to be shed on my grave! But, above all, may the example of an obscure individual kindle the emulation of patriots, princes, and public bodies; and engage them to give attention to this new, but powerful and infallible means, of serving posterity,

and contributing to the future improvement and happiness of the world!"

REMARK BY THE TRANSLATOR.

It is to be observed, that if M. Ricard had directed the interest of the money to be laid out every three months, it would have wonderfully increased the sums with the disposal of which his executors are entrusted.

One hundred livres will amount, if improved at 5 per cent. interest,

Paid yearly. Half-yearly.
Livres. Livres.
In 100 years, to 131,501 139,560
In 500 years, to 3,932,400,000,000 5,296,100,000,000
Paid quarterly.

In 100 years, to 143,890 livres.
In 500 years, to 6,166,000,000,000 livres.

If, therefore, the last 100 livres had been improved at 5 per cent. quarterly interest, his executors would have had an additional sum of 2,234,000,000,000 livres, (nearly equal to a hundred thousand millions Sterling,) which is a sum more than sufficient to encompass the

earth with a belt of guineas, all close, and five feet broad.

No. VI. (Page 264.)

EXTRACT of the Preamble to Cap. LXXI. of the 42d of the King.

"Whereas the public burdens may at this period be greatly alleviated, and the reduction of the national debt at the same time accelerated, by consolidating the public debt, and the whole of the said debt will thereby be redeemed within forty-five years."

CLAUSE V. OF THE SAID ACT.

"And be it further enacted, That all monies whatever which shall be placed from time to time to the account of the said Commissioners, by virtue of either of the said recited acts, (except so far as the same are hereby repealed,) or by virtue of this act, shall, and are hereby appropriated to, and shall accumulate in manner directed by the said acts, for the reduction of the national debt of Great Britain, and shall be from time to time applied by the said Commissioners,

pursuant to the directions, and under and according to the restrictions and provisions of the said recited acts, either in payment for the redemption, or in the purchase of the several redeemable public annuities of Great Britain, until the whole of the perpetual redeemable annuities, now charged upon the public funds of Great Britain, including such charge as has arisen, or may arise, on any loan made in Great Britain, before the passing of this act, and also such charge as shall arise by any annuities, interests, and dividends, payable in consequence of any loans made chargeable on the consolidated fund, by an act passed in this session of Parliament, entituled, An Act for repealing the Duties on Income; for the effectual Collection of Arrears of the said Duties, and accounting for the same, and for charging the annuities specifically charged thereon upon the Consolidated Fund of Great Britain, shall have been completely redeemed or purchased, so as that the whole of the several redeemable public annuities now charged upon the public funds of Great Britain, including such respective charges as aforesaid, shall be paid off within forty-five years from the respective periods of the creation of such respective charges and public annuities as aforesaid."

No. VII. (Page 265.)

STATEMENT, showing the Sum that must of necessity be abstracted from Expenditure, and converted into capital, every half-year, by an annual Income of L. 5,585,572, accumulated half-yearly, at 3 per cent. for forty-five years.

Years.	0 700 700
2	2,792,786.
	2,834,677.79
1	5,627,463 79
	2,877,197.956
11	8,504,661.746
. 3	2,920,355.926
2	11,425,017.672
	2,964,161.265
$2\frac{1}{2}$	14,389,178.937
	2,008,625.684
3	17,397,802.621
J	3,053,753,039
	3,000,100,000
$3\frac{1}{2}$	20,451,555.66
	3,099,559.334
4, _	23,551,114.994

Years.	
	23,551,114.994 3,146,052.724
41/2	26,697,167.718 3,193,243,515
5	29,890,411.233 3,241,142.168
$5\frac{1}{2}$	33,131,553.401 3,289,759 301
6	36,421,312.702 3,339,105.690
$6\frac{1}{2}$	39,760,418.392 3,389,192.2 75
	0,000,1100.270
7	43,149,610.667 3,440,030.160
$7\frac{1}{9}$	46,589,640.827

Years		Years.	0
1 cars	46,589,640.827	96,299,3	00.880
	3,491,630.612	4,237,27	
	3,491,030.012	4,237,2	(0.003
8	50,081,271.439	141 100,536,6	67 745
Ŭ	3,544,005.071	4,300,83	
	0,044,000.071	4,500,60	0.010
81	53,625,276.510	15 104,837,5	01.761
- 2	3,597,165.147	4,365,3	_
	0,007,1001117	1,000,0	10.020
9	57,222,441.657	151 109,202,88	50.287
	3,651,122.624	4,430,89	
$9\frac{1}{2}$	60,873,564.281	16 113,633,6	79.041
- "	3,705,889.464	4,497,29	
10	64,579,453.745	$16\frac{1}{2}$ 118,130,97	70.226
	3,761,477.806	4,564,78	50.553
101	68,340,931.551	17 122,695,79	20.779
	3,817,899.973	4,633,22	21.811
11	72,158,831.524	17½ 127,828,9	
	3,8 75 ,168.4 7 2	4,702,79	20.138
111	71: 000 000 006	10 10 001 6	20.00
$11\frac{1}{2}$	76,033,999.996	18 132,031,66	
	3 ,933, 2 95.999	4,773,26	0.940
12	79,967,295.995	181 136,804,99	2 660
~~	3.992,295.439	18½ 136,804,99 4,844,85	
	0.992,293.439	4,044,00	19.000
121	83,959,591.434	19 141,649,78	3 593
2	4,052,179.871	4,917,53	
	1,000,17,01071	2,317,00	72.702
13	88,011,771.305	191 146,567,31	6.275
	4,112,962.569	4,991,29	
133	92,124,733.874	20 151,558,61	2.019
_	4,174,657.008	5,066,16	5.180
14	96,299,390.882	201 156,624,77	7.199
		-	

Years. 156,624,777.199 5,142,157.657	Years. 229,832,799.555 6,240,277.993
21 161,766,934.856	27½ 236,073,077.548
5,219,290.022	6,333,882.163
21½ 166,986,224.878	28 242,406,959.711
5,297,579.373	6,428,890.3 9 5
22 172,283,804.251 5,377,043.063	$28\frac{1}{2} 248,835,850.106 \\ 6,525,323.751$
22½ 177,660,847.314	29 255,361,173.857
5,457,698.709	6,623,203.607
23 183,118,54 6 .023	29½ 261,984,377.464
5,539,564.190	6,722,551.661
23½ 188,678,110.213	30 268,706,929.125
5,622,65 7 .653	6,823,389.936
24 194,280,767.866	30½ 275,530,319.061
5,706,997.517	6,925,740.785
24½ 199,987,765.383	31 282,456,059.846
5,792,602.480	7,029,626.897
25 205,780,367.863	31½ 289,485,686.743
5,879,491.517	7,135,071.301
25½ 211,659,859 380	32 296,620,758.044
5,967,683.890	7,242,097.370
26 217,627,543.270 6,057,199.149	$32\frac{1}{2} 303,862,855.414 \\ 7,350,728.831$
26½ 223,684,742.419	33 311,213,584.245
6,148,0 5 7.136	7,460,989.763
27 229,832,799.555	331 318,674,574.008

Years.	Years.
318,674,574.008	417,434,424.167
7,572,904.610	9,054,302.362
34 326,247,478.618	40 426,488,726.529
7,686,498.179	9,190,116.897
34\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	401 435,678,843.426
7,801,795.651	9,327,968.651
35 341,735,772.448	41 445,006,812.077
7,918,822.586	9,467,888.181
35\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	41 454,474,700.258
8,037,604.925	9,609,906.503
3 6 357,692,199.959	42 464,084,606.761
8,158,168.999	9,754,055.101
36½ 365,850,368.958	421 473,838,661.862
8,280,541.534	9,900,365.927
37 374, 130, 910, 492	43 483,739,027.789
8,404,749.657	10,048,871.416
$37\frac{1}{2}$ $382,535,660.149$	$43\frac{1}{2}$ $493,787,899.205$
8,530,820.902	10,199,604.488
38 391,060,481.051	44 503,987,503.693
8,658,783.215	10,352,598.555
381 399.725,264.266	$44\frac{1}{2}$ 514,340.102.248
8,788,664.963	10,507,887.533
39 408,513,929.229	45 *524,847,989.781
8,920,494.938	
$39\frac{1}{2}$ 417,434,424.167	The second second

^{*} In Appendix, No. VIII. the annual sum of L. 5,585,572

No. VIII. (Page 266.)

THE following is the Statement of the Redemption of the National Debt, presented to the House of Commons, 7th April 1802.

Amount of Stock purchased in forty-five and forty-six years, at the several rates of Interest 3, $3\frac{1}{4}$, $3\frac{1}{2}$, $3\frac{3}{4}$, and 4 per cent. by a Sinking Fund of L. 5,585,572 per annum.

	In 45 years.	In 46 years.
At par, the consolidated sinking fund	£ 528,395,000	£
	488,987,656	
Surplus,	39,407.344	61,071,344
At $3\frac{1}{4}$ per cent. is purchased, Consolidated debt, 7th April 1802,	612,737,000 488 087 656	
	123,749 844	
Durpitos	13 011	

per annum, is stated as amounting in forty-five years, when accumulating at 3 per cent., to L. 528,395,000, This difference is supposed to arise from the calculation delivered into the House of Commons, proceeding on the supposition of a quarterly accumulation.

	In 45 years. In 46 years.
At 21 sout in numbered	£. £.
At $3\frac{1}{2}$ per cent. is purchased, Consolidated debt, 7th April 1802,	707,220,000 738,720,000 488.987.656 488,987.656
Surplus,	218,232,344 249,732,344
At 3\frac{3}{4} per cent. is purchased, Consolidated debt, 7th April 1802,	812,395,000 850,370,000 488,987,656 488,987,656
Surplus,	323,407,344 361,382,344
At 4 per cent. is purchased, Consolidated debt, 7th April 1802,	930,096,000 975,430,000 488,987,656 488,987,656
Surplus,	441.108,344 486,442,344

No. X. (Page 278.)

Ετι ή κ, ε τέτων μόνον ένεκα τῶν εἰρημενων εἰφραίνει τὰ πεμπόμενα παρά βασιλέως, άλλα τῷ ὄντι κὶ ήδονῆ πολύ διαφέρα τὰ ἐπὸ τῆς βασιλέως τραπέζης. Και τέτο μέντοι ούτως έχαν οὐδέν τι θαιμαςόν ώσπες χ χ άλλαι τέχναι <u>Αμ</u>ρεςόντως έν τ**ω**ς μεγάλαις πόλεσιν Κειείασμένα είσι, κατά τὸν αὐτὸν τρόπον και τὰ παρά βασιλεί σίτα πολύ Δρορερόντως εμπεπόνηται. Εν μεν γάρ τοῦς μικροῦς πόλεσιν οἰ αὐτοί ποιεσι κλίνω, θύρου, άροτρον, τράπεζαν (πολλάκις δ' ὁ αὐτὸς έτ 🕒 καὶ οἰκοδομεϊ, κὶ ἀίαπα ωὶ κὶ ἐτως ἰκανές αὐτὸν τρέφειν έργοδότας λαμθάνη άδιμά ο Εν πολλά τεχνώμενον άνθρωπον πάνδα καλῶς ποιᾶν·) ἐν ή τῶς μεγάλαις πόλεσι, διὰ τὸ πολλές ἐκάςε δεισθαι, άρπει κὶ μία επάςω τεχνη είς το τρεφεσθιει πολλάκις " οὐδ" όλη μία, άλλ' ὑποδημαία ποιεί ὁ μὲν ἀνδρεία, ὁ ζίνναικεία. Εςι ζί ἐνθα κ) ὑποδημαία ὁμέν νευροξέα τῶν μόνον, τρέφεται, ὁ δὲ, σχιζων ὁ Ϧ χίίωνας μόνον ζυντέμνων, ὁ δέ γε, τέτων έδεν ποιών, άλλά συντιθείς ταῦτα. Ανάγκη εν, ή έν βραχυτάτω Αρτείζουτα έργω, τέτον κ) άριςα διηναγκάσθαι τέτο ποιών. Τὸ αὐτὸ ή τέτο πέπουθε κὶ τὰ ἀμφὶ τὴν δίαιταν . ῷ μὲν γὰς ὁ αὐτος κλίνην ςςώννυζι, τςάπεζαν κοσμᾶ, μάτθει, όψα άλλοτε άλλοῖα ποιεί, ἀνάγκη, οῖμαι, τέτω ώς ἂν έκαςον προχωρή, έτως έχριν όπε ή Ικανόν έργον ένλ έψριν κρέα, άλλω όπτζεν, άλλω Δε ίχθυν έψειν, άλλω όπίζεν άλλω άςτες ποιείν, κ, μηδε τέτες πανδοδαπές, άλλα άρπει αν εν είδος ευ δοπιμέν παράσχη ἀνάίκη, οίμαι, Ιαύτα έτω ποιέμενα, πολύ Δίσφερόντως ίξειργάσθαι έχαςον.

Xenophon de Cyri Inst. p. 576. Edit. Hutch. in 4to.

No. XI. (Page 282.)

"Nous insisterons particulièrement sur les ressources des méchaniques Angloises, parce que cette nation doit, en grande partie, la supériorité de sa main-d'œuvre à l'usage de ses méchaniques, dans toutes les opérations où elles ont semblé praticables. En Angleterre, un courant d'eau fait, par son impulsion, agir en même temps des machines à décarder, à dégrossir, et à réduire par degré le coton à la ténuité nécessaire pour l'adapter à la filature, dont l'opération se fait par d'autres machines que le même courant d'eau fait mouvoir. Nous avons appris avec plaisir, que dans la collection des méchaniques faites à Paris, par ordre du Conseil, il en existe une très-parfaite en ce genre; mais il est trèspressant de les multiplier et de les mettre en usage. Cette tentative dispendieuse vient d'être entreprise à Louviers, avec assez de succès pour ne pas faire regretter les avances qui y ont été faites; mais quoique cette utile entreprise soit suivie par des négociants et des manufacturiers riches et éclairés, il devient très-important que le Gouvernement François daigne encourager spécialement les premiers efforts de cette indus-

TRANSLATION.

"WE shall insist principally on the resources the English nation derives from machinery, because that nation owes in a great measure the superiority of its manufactures to the use of machinery in performing every operation in which it can be employed. In England, a small rivulet sets a-going machines which at once clean, card, and reduce the cotton into a state adapted for spinning; which operation is also performed by other machines, put into motion by the same current of water. We have learnt with pleasure, that in the collection of the machines made at Paris, by order of Council, there is one admirably calculated for executing these operations; and it is of the greatest importance, that a number should be made and introduced into use. This very expensive undertaking has been just attempted at Louvier, with sufficient success to leave no room for regretting the expenditure it occasioned. But although, in this instance, this very useful undertaking has been gone into by some rich and enlightened manufacturers, to introduce it generally, it becomes very important that the French Government should specialtrie, et se prêter aux dispositions nécessaires pour en assurer le succès.

"Nous nous réunissons sur cet objet, au vœu du mémoire que les intéressés ont donné à M. le Contrôleur-Général; il présente les demandes les mieux motivées, l'instruction la plus satisfaisante sur cette entreprise, à laquelle ces messieurs ont donné leur temps, leur zéle et des fonds assez considérables.

"Nous ne nous dissimulons pas que nous devons répondre aux objections qu'on pourroit faire, d'après l'opinion qui a long temps régné en France, que plus nos manufactures occupoient d'ouvriers, plus elles étoient utiles; que l'on ne devoit pas trop chercher à simplifier les différentes opérations des fabriques; qu'il ne convenoit pas de faire faire à un seul ce qui pouvoit en faire subsister vingt. Nous ne nous étonnons pas, d'après ce principe, si on a moins cherché en France qu'en Angleterre à encourager les arts qui pouvoient diminuer le nombre des ouvriers employés à chaque opération; si même on a cherché à les eloigner.

ly encourage the first efforts of this sort of industry, and that it should make the necessary arrangements for insuring its success.

"On this subject we must join in enforcing the views contained in a memorial presented by those who are interested in the undertaking, to the Comptroller-General: the requests it contains are perfectly well grounded; and it affords the most satisfactory information on this undertaking, to the conduct of which these gentlemen have given up their time, and in which their zeal has made them embark a very considerable part of their funds.

be thought that we ought to answer to the objection usually started on this subject, that it has been an opinion long entertained in France, that the more workmen our manufactories occupied, the more they were useful; that it is an error to endeavour to simplify too much the different operations in the conduct of a manufactory, insomuch as it is a public loss to do by the hand of one an operation in performing which twenty may acquire their livelihood. We are not astonished, considering the prevalence of this opinion, that in France there has been less anxiety than in England to encourage those de-

"Les Anglois ont vu la même chose d'une manière absolument opposée; ils ont pensé que dans une nation riche et d'une grande agriculture, la main-d'œuvre devoit être chère; que sans une industrie particulière, leurs manufactures ne pourroient lutter avec celles des pays où l'argent n'est pas si abondant; qu'ils n'avoient d'autre moyen de conserver l'avantage de leur côté, qu'en faisant faire à un seul les opérations qui en occupoient plusieurs; qu'ils craindroient mal-à-propos qu'une partie de leurs ouvriers restât sans travail, que s'ils pouvoient, en simplifiant leurs opérations, baisser le prix de leurs étoffes, ils en augmenteroient infiniment les débouchés et la consommation; qu'enfin le produit le leurs manufactures se consommeroit dans l'étranger, ou dans leur propre pays; que dans le premier cas, ils n'auroient la préférence qu'autant qu'ils vendroient à meilleur marché; que dans le second, ce seroit une injustice de ne pas employer tous les moyens qui pourroient les mettre à portée d'établir, par leur propre indusvices which tend to diminish the number of workmen employed in the conduct of each operation; nay, we are not surprised that there have even been attempts made to discourage such contrivances.

"The English nation have taken quite a different view of this subject: they have thought, in a rich and flourishing agricultural country. where the wages of labour must be dear, that without particular contrivances, their manufactures could not come into competition with those of a poorer country; that they had, therefore, no other means of preserving a superiority, than by contriving to execute the same thing by one hand that used to occupy many; that it was a foolish ground of apprehension to dread that a part of their workmen would remain without employment; for that by simplifying the process of manufacturing, they lowered the prices of their stuffs, and by that means augmented greatly the demand for them, and the consumption of them. Finally, as the produce of their manufactures could only be consumed abroad, or at home; that, in the first case, they could alone command a preference in the market, by selling at a lower price; and that, in the second, in justice they owed to themselves to employ every

trie, et sans avoir recours à l'étranger, au prix le plus modéré possible, les choses agréables, utiles ou nécessaires à leurs concitoyens."—Observations de la Chambre du Commerce de Normandie, sur le Traité de Commerce entre la France et l'Angleterre, p. 21.

"Il suffit de connôitre la nature des établissemens de commerce dans ce pays, (Angleterre,) pour sentir tous les avantages qu'ils doivent avoir sur ceux de France, même à circonstances égales; que sera-ce avec tous ceux que leur donnent leur constitution, la qualité de leurs productions, la perfection à laquelle ils ont poussé leurs inventions pour améliorer leurs étoffes et diminuer le prix de la main-d'œuvre, et enfin l'abondance de leurs capitaux, et le bas prix de l'intérêt de l'argent.

"On sentira que tous ces avantages les mettent en état de fournir leurs marchandises à bien meilleur marché, et de gagner où il n'y auroit que de la perte pour ceux qui n'en jouissent pas, sans que le Gouvernement s'en mêle et fasse des sacrifices. C'est sur quoi on entrera dans quelques détails. means that could be suggested, of establishing by their own industry, without having recourse to foreigners, the manufacture at the cheapest possible rate, of all those things which are either useful or agreeable to their fellow-citizens."—Observations of the Chamber of Commerce of Normandy on the Commercial Treaty with England, p. 21.

"It is sufficient to be acquainted with the nature of commercial and manufacturing establishments in England, to be convinced of all the advantages which that country must have over France, even without those advantages which they must derive from their Government and constitution, the quality of their productions, the perfection to which they have pushed inventions for ameliorating their manufactures, and diminishing the cost of manufacturing; and finally, the abundance of their capitals, and the low rate of the interest of money.

"It is plain, that all these advantages enable England to furnish its merchandise much cheaper than France, and to gain by selling things at a price that would occasion a loss to a country which did not enjoy the same advantages; so that, unless the Government of France lends assistance, and makes sacrifices, there could be no

"Les établissemens de tous genres d'industrie en Angleterre sont très-considérables, et sont soutenus par de très-gros fonds, parce que leurs entrepreneurs les suivent de père en fils sans changer d'état, et que les fonds s'y accumulent, ainsi que les moyens et les talens, &c.; ce qui les met en état de travailler en grand, de se pourvoir à l'avance abondamment et au meilleur marché, des matures premières, de faire les plus grandes enterprises, et de fournir facilement et promptement aux demandes les plus fortes."—Seconde Partie du Recueil de divers Mémoires relatifs au Traité de Commerce avec l'Angleterre, p. 17.

competition. On this subject it is necessary to enter into some detail.

"The establishments for the conduct of all sorts of manufactures in England are on a great scale. They are supported by very large capitals. The manufacturers, from father to son, follow the same profession; by which means, their funds accumulating, they can carry on very extended operations, provide for themselves the raw materials at the cheapest rates, undertake the most extended commissions, and execute with ease at a moment the largest orders."—The Second Part of the Collection of Memorials relative to the Treaty with England, p. 17.

No. XII. (Page 283.)

"IT seemed a paradox, nay, almost a miracle, to all the world, that you lost a whole continent, containing some millions of constant customers, and yet that you did not experience any considerable distress! Supposing the colonies purchased from England to the amount of three millions per annum; Manchester may reasonably be supposed to have furnished at least onetenth part of this sum; and one would think a demand to the amount of three hundred thousand pounds a-year could not be lost, without being very sensibly felt in that place and neighbourhood. The machines for carding, roving, and spinning cotton, those ingenious machines that, in a fit of madness, your people have lately destroyed, can alone unfold the mystery. These machines, which ingenuity had long been labouring to produce, and which, about this time, were happily brought to a considerable degree of perfection, enabled you to make your goods better and cheaper than usual; which produced new and extraordinary demands from the continent of Europe, and saved your work-people and

manufactories from distress and ruin."—Letters on the Utility and Policy of employing Machines to shorten Labour, p. 9. Published in 1780.

" For the relief of the woollen manufactories, the remedy must, I think, be obvious. Let similar machines to those invented in Lancashire but particularly adapted to carding and spinning of wool, be put into the hands of the wool and jersey spinners, &c.; the consequence of which will be, that the spinners will get three times as much money as they have hitherto been accustomed to do; that they will make much more yarn, much better and much cheaper, and consequently that the manufactures will be so improved, and brought to market to so much greater advantage than usual, that the demand will probably increase, even under all our present difficulties and obstructions; and if peace should soon be happily established, and the way to foreign markets be made more open and easy, the prospect of improvements, and of the extension of our woollen trade, would become great, and even boundless.

"We must change our methods of proceeding with the state of things, which are always changing; or we must keep within our own island, and resolutely cut off all communication with

the rest of the world. We cannot make cheap goods in dear times, and under high taxes, and expensive habits of life, without extraordinary assistance. The competition of Europe is now become rather a contest in skill and ingenuity than in natural strength."—Hints for the Improvement of the Woollen Manufacture, p. 30. Published in 1780.

"The aid that has been given to labour in the cotton manufacture by machinery, is not likely to be applied to the linen manufacture in any great degree. The fly-shuttle and the flax-mill are the principal aids lately acquired by the latter. The ingenuity of Mr Arkwright and others has done much for manufactures; but the nature of flax makes it difficult to apply to it the cotton-machinery, even to the degree that has been introduced into the woollen manufacture within three or four years, especially in spinning and scribbling."—Observations on the Manufactures and Trade of Ireland, by Lord Sheffield, p. 65.

"The surprising advances of chemistry and the effects of its application to manufactures; the wonderful combinations of chemistry and mechanics, for the reduction of labour,—these are the happy means by which bankruptcy has been hitherto averted. The security of property, and the spirit of liberty diffused through the nation, have called forth the talents of our people. Britain has grown prosperous in spite of the wretched politics of our rulers. The genius of Watt, Wedgwood, and Arkwright, has counteracted the expence and folly of the American war."—Letters Commercial and Political, by Jasper Wilson, p. 7.

"The following brief statement will serve to exhibit the rapid progress of the cotton manufacture, as well as its present importance to the interests of the British Empire:—

"In the year 1765, cotton, as an article of commerce, was scarcely known in this country.

" A few years afterwards, Mr Arkwright obtained his patent for working cotton by machinery.

"In 1782, the whole produce of the cotton manufacture did not exceed two millions Sterling.

"In 1801, the import of cotton wool into Britain was forty-two millions of lbs.; and the estimated value of the cotton manufacture fifteen millions Sterling; such was the rapid increase of this trade to the end of the year 1801.

" From the documents procured, it appears,

that the import of this article in 1802 has not been less than fifty-four millions of lbs.; and the particulars of the trade are as follow:

"The raw material, when delivered on board the merchant ships, now costs about four millions Sterling. Upwards of thirty thousand tons of shipping, and about two thousand seamen, are constantly employed in bringing the cotton-wool to this country, and in exporting the goods manufactured from it. To work the wool into thread, requires a capital in building and machinery, to the amount of nine millions two hundred and twenty-five thousand pounds; and those buildings and machinery are chiefly composed of bricks, slates, glass, timber, lead, iron, copper, tin, and leather; from most of which, in one shape or other, a considerable duty is collected for the support of the State.

"This trade gives employment or support to upwards of eight hundred thousand individuals, and the annual return of the manufacture is nearly as follows:

"Cost of cotton in the countries where it grows, insurance, freight, other shipping charges and merchants' profit, - L. 4,725,000

Brought forward, L. 4,725,000

- "The interest, at 5 per cent., upon
 the capital of L. 9,225,000, sunk
 in building and machinery, with
 10 per cent. for wear and tear of
 ditto, - 1,383,750
- "Wages of spinning, value of materials consumed in the process of spinning the cotton into thread, and spinners' profit, 5,100,000
- "Value of materials consumed in subsequent manufactures, manufacturing wages, interest of capital and profit, - 9,000,000

L. 20,208,750

Of which sum, at least thirteen millions Sterling are paid in wages to the natives of Great Britain."—Observations on the Cotton Trade of Great Britain, printed at Glasgow.

"Should it be supposed that we have little to fear from foreign competition, it may be justly asked, what is to become of the produce of the cotton-mills now established in France, Prussia, Saxony, and other places upon the continent, where it can easily be proved, this manufacture

is now in a more perfect state than it was in this country twenty years ago? It is also well known, that some of these powers are holding out the most flattering inducements to many of our fellow-subjects, whom they imagine competent to the task, to go and put these establishments upon an equal footing with the best in Britain; and out of so great a number now in the knowledge of this manufacture, it cannot be doubted that many individuals will be tempted by these offers."—Ibid.

No. XIII. (Page 322.)

STATEMENT of the population which a farm of 504 acres of fertile land will maintain, when under a judicious mode of cultivation, the inhabitants living entirely on vegetable food; and the numbers which can be supported on animal food by the produce of a like farm when in pasture.

"WITH a view to ascertain this point with as much precision as the nature of the calculation will admit of, I called at the families of several labourers and mechanics in this place, who live entirely on vegetable food, to learn, if possible, the exact amount of their consumption, which I knew, that, out of policy, they are always at pains to exaggerate. In the first house I entered, I luckily found the kettle full of potatoes, just ready to be put upon the fire to be boiled for dinner: the family consisted of one man, his wife, and one child, a remarkable stout boy of eleven years of age. I was informed, they regularly dined and supped upon them every day, and that the quantity in the kettle served them for both the meals. I immediately weighed the

potatoes in the kettle, and found that they amounted to nine pounds avoirdupois, and was informed that eight pounds of oatmeal served them for breakfast in pottage a week. The second family I entered was composed of three men, one woman, and six healthy children, three of whom were born at one birth; this family also dined and supped upon potatoes; the quantity they had prepared to dress for dinner weighed thirteen pounds, and I was informed it required near four pounds oatmeal each day for their breakfast. After examining the consumption of several families that had two meals of potatoes per day, I found, to my astonishment, that about $2\frac{2}{3}$ lbs. avoirdupois raw potatoes, and $5\frac{1}{3}$ ounces good oatmeal, when made into pottage, did actually maintain, for one day, in good health and condition for labour, on an average, each individual of a family, composed of two parents and three children, as long as their stock of potatoes lasted. Having thus ascertained the length which potatoes and oatmeal will go as food, when a vegetable diet only is used, I shall proceed to calculate the quantum of population that the farm of 504 English statute acres, fertile land, well cultivated, will maintain, under the following mode of cropping:

PRODUCE, AFTER DEDUCTING SEED.

No. Ibs. potatoes.

I. 84 acres of potatoes, average produce of Laucashire 250 bushels per acre, at 90 lbs. deducting 18 bushels for seed, - 1,753,920

II. 84 acres wheat, at 30 bushels per acre, at 58 lbs. per bushel, deducting 3 lbs. per bushel rough bran, product 2520 bushels of lbs. meal. meal, at 55 lbs. per bushel, - 138,600

III. 84 acres pease and beans, at 24 bushels, 2016 bushels, one-half eaten by the horses on the farm; one-half, 1008 bushels, at 40 lbs. meal per bushel, - 40,320

1V. 84 acres barley, at 36 bushels, 3024,at 46 lbs. meal per bushel, - 139,104

Pounds meal, 318,024 or 397,530

V. 84 acres clover consumed by cattle.

VI. 84 acres oats, at 60 bushels, 5040 bushels, 13,440 pecks of oatmeal, at 8 lbs. per pecks

504 acres { 1,753,920 lbs. potatoes, at $\frac{1}{3}$ lbs. per meal to each indidual, — 1,312,940 26* { 397,530 lbs. bread, at $\frac{3}{4}$ lb. per meal to ditto, — 530,040 13,440 pecks oatmeal, at 24 meals per peck to do. — 322,560

365 days, at 3 meals per day, 1095)2,165,540(1977

^{*} Garden ground.

"In this manner, 504 acres of fertile land, the garden ground not included, will maintain, when well cultivated, 1977 people old and young; and if the population of Great Britain amounts to nine millions, it would require only 2,412,746 fertile acres, well cultivated, to maintain them when living on the same portions of vegetable food as the common people do in Scotland.

"I shall next proceed to inquire into the number of people which the same farm of 504 acres, in pasture, would maintain when living entirely on animal food.

"This branch of rural economy, of determining the quantity of animal food which land will produce, although of considerable importance, has never been properly attended to. Mr Young, indeed, has begun the investigation; but as yet it has been confined to ascertain the fattening quality of different animals and vegetables. Upon consulting several intelligent farmers, it seemed to be their opinion, that an acre of good grass might, in the season, increase the weight of the animals fed upon it twelve stone, at 14 lbs. to the stone; which, at 5s. per stone, would afford a good rent, and leave a

handsome allowance for management, and profit on the capital employed. Fixing, therefore, upon twelve stone as the quantum of animal food which an acre of our farm will produce; upon this data, the 504 acres will give 6048 stones, or 84,672 lbs. I have not been able to learn what proportion of weight the bones in the carcase of an ox bears to the flesh; but allowing three quarters of a pound of bones and flesh, on an average, to a meal for each individual, at 3 meals per day, 84,672 lbs. will support an individual 37,632 days; or, in other words, the produce of the farm will support a population of 103 individuals throughout the year; dividing these into 20 families, and allowing one-fourth of an acre of garden ground to each family, it amounts in all to 509 acres. Upon calculating from these data, it will be found, that it would require 44,475,728 fertile acres, to maintain the population of Great Britain, each individual, upon an average, consuming 21 lbs. of butcher-meat per day; but the same number of acres would support a population of 165,921,725 individuals of all ages, if the inhabitants lived on the same portions of vegetable food which at present subsist the common labourers in Scotland."-

(See Mr Mackie's Second Letter to the Editor of Dirom's Inquiry into the Corn Laws, printed as a Supplement to that Work, p. 241.

On the same subject, there is much information to be found, Chapter II. of Mr Arthur Young's Essay on the conversion of Grass Lands into Tillage, printed in the third volume of Communications to the Board of Agriculture. That the number of the inhabitants of Great Britain nourished on animal food has greatly increased is notorious. The proportions therefore of land requisite to furnish a man with animal food and with vegetable food, becomes a question of the greatest importance, and well deserves the further consideration of our writers on agriculture; for the solution of it will give the best, perhaps the only possible explanation of the extraordinary fact, (stated by the Lords Commissioners of the Council, in their report on the Corn Laws and Corn Trade, 1790,) that this country, which, from the year 1746 to the year 1765, exported on an average six hundred and fifty-one thousand pounds worth of grain per annum, has not for many years,

notwithstanding its great agriculture improvements, been able to raise a sufficiency for its own inhabitants.

No. XIV. (Page 335.)

DRAPERIES.

"LES fabricans François de Louviers, Abbeville et Sedan, ne craignent point la concurrence de ceux Anglois: ils sont même persuadés que si ceux-ci trouvoient de la consommation en France, ils en seroient dédommagés par celles qu'ils trouveroient en Angleterre. Ce seroit de part et d'autre l'effet du caprice des gens riches des deux nations; ainsi rien à craindre ni à gagner sur l'objet des draps fins de la concurrence réciproque.

"Les draps communs et les petites draperies donnent lieu à des observations dont les résultats sont bien différens."—(Observations sur le Réplique de M. Eden à M. de Rayneval. Recueil de divers Mémoires, relatifs au Traité de Commerce avec l'Angleterre, p. 137.)

"L'Angleterre a les moyens d'établir, dans tous les marchés étrangers, leurs draps ordinaires, et une grande quantité de petites étoffes de laines à des prix beaucoup au dessous de celles

TRANSLATION.

WOOLLEN CLOTHS.

"The French manufacturers at Louviers, Abbeville, and Sedan, are not afraid of a competition with those of England; they are even persuaded, that, if the latter should find a demand for their goods in France, the French manufacturers would be indemnified by a demand for theirs in England. In both cases, this would depend on the caprice of opulent persons in the two countries; so there would be nothing either to fear or to gain from a reciprocal competition respecting superfine cloths.

"The common and coarse cloths furnish observations of which the result is very different."

—Observations, &c. p. 137.

"In all the foreign markets, England possesses the means of establishing its common cloths, and a great quantity of coarse woollen stuffs, at much lower prices than those of France. This may be de France. C'est ce que l'on a vu constamment en Espagne, où les femmes du peuple sont habillées généralement d'étoffes Angloises; c'est ce que confirment tous les mémoires qu'ont fourni en dernier lieu les Consuls de ce pays; et ceux qu'ont fourni ceux d'Italie, présentent exactement les mêmes détails, sans que les fabriques de France puissent entrer en concurrence avec les Anglois sur la plupart de ces étoffes."—

1 bid. p. 141.

"Les Anglois sont forcès de rendre justice à la beauté des draps de Louviers, ainsi qu'à ceux d'Abbeville et de Sedan; ils ne peuvent se dissimuler qu'ils sont plus doux que les leurs; et que les couleurs en sont plus vives et plus séduisantes."—(Observations de la Chambre du Commerce de Normandie sur le Traité de Commerce entre la France et l'Angleterre, p. 37.)

"Nous estimons que, dans les draps ordinaires de cinq quarts de large, et du prix de 15 à 16 liv. l'aune, les fabriques d'Elbeuf ne pourront soutenir la concurrence des draps de Leeds, appellés draps de Bristol, qui, dans le même laize, ne coûtent pas 11 liv. Tournois l'aune. Les fabricants d'Elbeuf ont plus de confiance dans leurs draperies plus fines."—Ibid. p. 41.

constantly seen in Spain, where the women of the lower orders are generally dressed in English stuffs; which is confirmed by the latest memorials from the Consuls of that country; and such as have been furnished by those of Italy exhibit precisely the same details; the manufactures of France being unable to sustain a competition with those of England respecting the greatest part of those stuffs."—Ibid. p. 141.

"The English are under the necessity of doing justice to the beauty of the broad cloths of Louviers, as well as those of Abbeville and Sedan; they must confess that they are softer, and of a more vivid and captivating colour than those of England."—Observations, &c. p. 37.

"We reckon, that, as to common cloths, five quarters broad, and of the price of from 15 to 16 livres a-yard, the manufactures of Elbeuf cannot vie with the cloth manufactured at Leeds, that go by the name of Bristol cloths, which, though of the same breadth, do not cost 11 livres a-yard. The Elbeuf manufacturers have greater confidence in their cloths of a finer quality."—Ibid. p. 41.

"Ce sont donc les draps de Wiltz et de Glocester qui se débitent à Londres, qui pourront entrer en concurrence avec ceux de Louviers; et nous ne doutons pas que le Gouvernement Anglois ne se soit déjà occupé des moyens propres à encourager les fabricants de ces draps, à combattre non seulement en Angleterre, mais jusqu'en France même, la préférence à laquelle les draps d'Abbeville, de Sedan, et particulièrement ceux de Louviers, peuvent prétendre aujourd'hui,"—Ibid. p. 59.

"Les draps de Leeds, dits Refoulés et à Double Broche, obtiendront en général la préférence sur ceux de Vire Déjà depuis la paix, ces derniers ont perdu leur crédit chez les Américains; et il est certain qu'à mesure que la finesse de nos tissus diminue, ou que nos draperies approchent des qualités communes, les draperies d'Angleterre ont un avantage sensible sur les nôtres."—Ibid. p. 61.

Soieries.

"Celles de France l'emportent beaucoup sur celles d'Angleterre, pour le goût; ce qui, joint au bon marché, doit donner l'espoir bien fondé d'en importer beaucoup, si les droits sont sur

"The cloths of Wiltshire and Gloucestershire, which are brought to the London market, are those which will enter into competition with the cloths of Louviers; and we have no doubt that the English Government have already taken the proper steps for encouraging the manufactures of those cloths, in order to do away, not only in England, but even in France, the preference to which the cloths of Abbeville, Sedan, and especially of Louviers, have at present pretensions."—Ibid. p. 59.

"The cloths of Leeds, which they call Double Tweeled and Drab, will, in general, be preferred to those of Vire. Already, since the peace, these last have lost their credit with the Americans; and it is certain, that, in proportion as our stuffs diminish in fineness, or our cloths approach the common qualities, those of England have an obvious advantage over ours."—Ibid. p. 61.

SILKS.

"Those of France have a decided advantage over those of England in point of taste; a circumstance which, joined to their cheapness, furnishes well-grounded hopes of a large quantity un pied modéré."—(Recueil de Mémoires, &c. p. 86.)

"M. de Rayneval a demandé, de la part de la France, qu'on fixât les droits. 1. Sur les vins, eaux-de-vie et vinaigres. 2. Sur les soieries et modes. 3. Sur la batiste, linons et autres toiles. 4. Sur les glaces.

" Quant au premier, M. Eden espère qu'il a donné une réponse satisfaisante, pour ce qui est du deuxième; comme la prohibition en Angleterre sur les soieries venant de l'étranger est générale, excepté pour les crêpes de soie, et une espèce de soie appellée tiffanie, des manufactures d'Italie, qui peuvent y être introduites en payant un droit assez considérable, cette prohibition ne peut pas être abolie pour des raisons assez connues, quoiqu'il y ait plusieurs articles dans la soierie où l'Angleterre auroit grandement l'avantage sur la France, nommément dans les rubans, peut-être aussi dans les bas de soie, les gazes, et presque toutes les étoffes mêlées de soie."--(Réplique de M. Eden à M. de Rayneval. Ibid. p. 150.)

Toileries.

" Celles de Saint Quentin sont les seules de

of that article being imported into England, if the duties are fixed on a moderate footing."— Collection of Memoirs, &c. p. 86.

"M. de Rayneval has demanded, on the part of France, that the duties should be fixed, 1. Upon wines, brandy, and vinegar. 2. Upon silks and millinery goods. 3. Upon cambric, lawns, and other linen cloths. 4. Upon glass.

"As to the first, Mr Eden hopes he has given a satisfactory answer. With respect to the second; as in England the prohibition of foreign silks is general, except silken crapes, and a kind of silk called tiffany, both Italian manufactures, which may be introduced on paying a considerable duty; that prohibition cannot be abolished for reasons sufficiently known, although there are many articles in the silk manufacture wherein England would have greatly the advantage over France; in ribbons, for instance, perhaps also in silk stockings, ganzes, and in almost all stuffs mixed with silk."—Reply, &c. p. 150.

LINENS.

"Those of St Quintin are the only French

France que l'Angleterre soit dans le cas de consommer; elle tire toutes ses autres toiles d'Irlande, de la Suisse, de la Flandre, et de l'Allemagne.

"Il s'est établi en Ecosse des fabriques de toiles de même genre que celles de Saint Quentin; mais, malgré tous les encouragemens qu'illes reçoivent, elles sont encore fort au-dessous de celles-ci."—(Observations délivrées à M. de Calonne, sur la Note fournie par le Ministre de France. Recueil de Mémoires, p. 84.)

"M. de Rayneval a demandé, de la part de la France, qu'on fixât les droits, 3°, sur la batiste, linons et autres toiles."—(Réplique Confidentielle, remise par M. Eden à M. de Rayneval. Recueil de Mémoires, p. 150.)

"Quant aux troisième, c'est à-dire les batistes, linons et les autres toiles M. Eden a déjà répondu à ce qui concerne les toiles, et il croit à la satisfaction des Ministres de sa Majesté Très-Chrétienne.

"Sa Majesté sera prête d'entrer en négociation pour lever les prohibitions sur les batistes et linons importées de France, et de réduire les droits à environ 12 ou 15 per cent. ou 6 sh. pour demi pièce, à l'entrée du Royaume aux batistes et linons de France, principalement aux plus linens that find consumption in England; all the rest of her linens are drawn from Ireland, Switzerland, Flanders, and Germany.

- "Linen manufactures of the same kind with those of St Quintin have been established in Scotland; but notwithstanding every encouragement given them, they are still far inferior to the manufactures of St Quintin."—Observations, &c. p. 80.
- "M. de Rayneval has demanded, on the part of France, that the duties should be fixed, 3dly, on cambric, lawns, and other linens."—Confidential Reply, &c. p. 150.
- "As to the third article, to wit, cambrics, lawns, and other linens, Mr Eden has already answered as far as concerns linens, and, he believes, to the satisfaction of the Ministers of his Most Christian Majesty.
- "His Majesty will be ready to enter into a negociation for taking off the prohibition on cambrics and lawns imported from France, and to reduce the duty nearly to 12 or 15 per cent., or 6s. for the half piece, upon the entrance of French cambrics and lawns into the kingdom,

fines, dans lesquelles les François excellent principalement."—Ibid. p. 154.

Modes.

"Le goût qui s'est introduit à Londres pour les modes Françoises, est susceptible de la plus grande augmentation; il est donc très-intéressant d'obtenir à l'admission de celles de France, les conditions les plus amples et les plus favorables."—(Observations délivrées à M. de Calonne, sur la Note fournie par le Ministre de France. Recueil de Mémoires, p. 86.)

"A l'égard de l'article des modes, que M. de Rayneval range avec celui des soieries, on pense qu'il est a propos de laisser cet article dans la classe de cette multitude d'objets qui seront compris dans la règle générale dont leurs Majestés sont convenues."—(Réplique Confidentielle, remise par M. Eden à M. de Rayneval. Recueil de Mémoires, p. 152.)

"La France a demandé l'entrée de ses modes; M. Eden renvoie cet article dans la classe des objets généraux, renvoyés à être traités comme la nation la plus favorisée; tournure plus que suspecte, ne pouvant ignorer que les modes sont especially on the finest sorts, in which the French chiefly excel."—Ibid. p. 154.

MILLINERY.

"The taste that has been introduced in London for French millinery is susceptible of the greatest augmentation; it is, therefore, of very great consequence to obtain for the admission of articles of this nature, made in France, the most ample and favourable terms."—Observations delivered to M. de Calonne, &c. Coll. Mem. p. 86.

"With regard to the article of millinery, which M. de Rayneval ranks with that of silks, it is thought it would be fittest to leave that article to be arranged along with that multitude of objects to be comprised in the general rule on which their Majesties are agreed."—Confidential Reply of Mr Eden, &c. p. 152.

"France demanded the liberty to import into England millinery goods; Mr Eden wishes to refer that article to the class of general objects; a style of answer more than suspicious, as he cannot be ignorant that millinery is a sort of un genre de commerce qui est particulier à la France."—(Supplément aux Observations, &c. p. 43.)

"Le commerce des modes, qui est une branche intéressante de celui de la France, et dans laquelle elle réussit si bien par le goût de ses artistes, sembloit devoir être une espèce de compensation et de dédommagement pour la France; mais l'Angleterre l'a rendu presque illusoire par les défenses et les restrictions qu'elle met à leur admission."—(Septième Mémoire. Commerce que la France fait en Angleterre, en conséquence du Traité. Recueil, p. 62)

"Malgré le dédain du patriotisme Anglois pour nos modes et nos usages, l'élégance de nos parures eût insensiblement triomphé de la résistance nationale, si le Gouvernment Anglois n'en eût pas prévu l'ascendant."—(Observations de la Chambre du Commerce de Normandie, p. 65.)

GLACES.

"Les droits établis sur celles de France équivalent à une prohibition. Il seroit, sans doute, fort intéressant d'obtenir une modération qui pût donner lieu à une introduction plus forte." manufacture peculiar to France."—Supplement to the Observations, &c. p. 43.

"Millinery, which is an interesting branch of the commerce of France, and in which the taste of her artists enables her to be so successful, seems to be an article which ought to afford a kind of compensation and indemnification for France; but England has rendered that advantage almost nugatory, by the prohibitions and restrictions she imposes upon its admission."—Seventh Mem. &c. Coll. p. 62.

"In spite of the contempt expressed by English patriotism for our millinery and articles of fashion, the elegance of our dresses would have triumphed over the resistance the nation made to receive them, if the English Government had not foreseen the advantage we are likely to derive from it."—Observations of the Chamber of Commerce of Normandy, p. 65.

GLASS.

"The duties imposed on those of France are equivalent to a prohibition; it would no doubt be of very great consequence to obtain a diminution, which would give a prospect of a greater

— (Observations délivrées à M. de Calonne, sur la Note fournie par le Ministre de France. Recueil de Mémoires, p. 87.)

"M. de Rayneval a demandé, de la part de la France, qu'on fixât les droits, 4°, sur les glaces."--(Réplique Confidentielle, remise par M. Eden à M. de Rayneval. Recueil de Mémoires, p. 150.)

"Quant au quatrième, pour ce qui concerne les glaces, les Ministres d'Angleterre pensent qu'il est question tant des glaces pour les miroirs, que d'autres espèces de verres plats; et ils sont à même de prendre des informations pour constater s'il est possible de fixer un certain droit sur lequel cette marchandise peut être imposée dans l'un et l'autre royaume."—Ibid. p. 156.

"Pour ce qui regarde les glaces, attendu que les établissemens de France sont bornés, et ne sont pas susceptibles d'une grande augmentation, par rapport à la disette des bois, qui deviennent tous les jours plus rares. Mais il n'en seroit peut-être pas de même vis-à-vis de l'Angletterre, pour les cristaux, qu'elle seroit dans le cas de fournir à la France, vu la grande supériorité

quantity being introduced into England."—Observations delivered to M. Calonne, &c. p. 87.

"M. de Rayneval has demanded, on the part of France, that the duties on importation in England should be fixed, 4thly, on glass."—Confidential Reply delivered by Mr Eden, p. 150.

"As to the fourth demand, which concerns glass, the English Ministry thinks that it is necessary to take under consideration not only glass in the shape of mirrors, but all other sorts of flat glass; and they are at present occupying themselves to get information, that will enable them to ascertain whether it is possible to fix certain rates of duties, under which this sort of merchandise may be admitted into the one and the other kingdom."—Ibid. p. 156.

"As to what regards glass, it must be observed, that the establishments in France are limited, and are not susceptible of great augmentation, upon account of the deficiency of fuel, which becomes every day more scarce. But this, perhaps, would not be the case with England, in relation to articles of crystal, with which she would certainly furnish France, considering the great superiority she enjoys in this sort of

qu'elle a dans ce genre d'industrie."—(Observations sur la Réplique, &c. p. 157.)

PORCELAINE.

"M. Eden ajoutera ici, que les Ministres de sa Majesté Très-Chrétienne souhaitent peut- être que la meilleure porcelaine François soit admise en Angleterre, sur un droit raisonable: Les Ministres d'Angleterre souhaitent aussi, qu'il soit fait quelque changement sur les droits que la fayence et la poterie devroient payer à la conclusion de ce Traité, en vertu du premier article des deux déclarations."—(Réplique de M. Eden, p. 156.)

"Cette dernière insinuation de M. Eden sur la porcelaine, sur la fayence et poterie, donne lieu à quelques réflexions.

"La porcelaine de France peut être recherchée en Angleterre. On doute cependant que cet objet d'industrie que est très cher, et par conséquent ne peut être qu'à la portée des gens trèsriches, pût donner lieu à une exportation importante.

" Mais la poterie et la fayence ne sont pas dans ce cas là; les Anglois ont sur ces deux objets manufacture."—Observations on the Reply, &c. p. 157.

CHINA.

"Mr Eden must here add, that as the Ministers of his Most Christian Majesty may perhaps wish that the fine French china should be admitted into England, on paying a moderate duty; so the English Ministers wish that there should be some change made on the duties which stoneware and coarser sorts of pottery are to pay at the conclusion of this Treaty, in a manner consistent with the spirit of the first article of the two declarations."—Reply of Mr Eden, &c. p. 156.

"This last insinuation of Mr Eden, on the subject of china, stoneware, and pottery, gives rise to some serious reflections.

"The china of France may be in high esteem in England. It is a matter of doubt, however, whether this article of manufacture, which is very high priced, and which of course can only be sought after by men of great fortune, can be exported to any great extent.

"But the pottery and stoneware of England are not in the same situation, and the English

une supériorité décidée sur les François."— (Suite des Observations sur la Réplique de M. Eden, p. 158.)

ORF VRERIE, BIJOUTERIE, QUINCAILLERIE.

"On est persuadé que la France a l'avantage sur les articles d'orfévrerie et de bijouterie sur l'Angleterre, par le goût et le talent de ses artistes. Il est question de savoir s'ils sont sujets, en Angleterre, aux mêmes droits et aux mêmes loix qu'en France; parce que si les droits en France étoient plus forts, et les loix plus gênantes, il faudroit mettre les François de niveau, par une prime proportionée à la sortie et par des modifications sur les loix."—(Observations délivrées à M. de Calonne, p. 88.)

"Pour servir de compensation à ces avantages, qui certainement sont très-importans, on attend que la France se prêtera de son côté à des arrangemens dont la Grande Bretagne puisse profiter à son tour. On espère donc que la

have on these two articles a most decided superiority over the French.'—Sequel of the Observations on the Reply to Mr Eden, p. 158.

Goldsmiths' ware, Jewellery, and Hards ware.

"There is a general conviction that France has the advantage over England in articles of goldsmiths' ware and jewellery, in consequence of the taste and talents of her artists. It becomes, therefore, an interesting circumstance, to learn whether these articles, on exportation, are subject to the same rates and regulations in England as in France; because, if in France the duties are greater, and the regulations throw more difficulty in the way of exportation, it would be necessary to put the French artists upon an equality, by moderating the restraints of the law, and giving a proportional bounty on exportation."—Observations delivered to M. de Calonne, p. 88.

"To serve as a compensation for these advantages, which certainly are very important, it is expected that France, on her side, will adopt arrangements by which Great Britain may acquire similar advantages. For this purpose, it is

quincaillerie, en y comprenant tous les ouvrages d'acier et de fer, sera admise mutuellement en payant des droits modérés."—(Réplique de M. Eden, p. 132.)

"L'entrée des quincailleries d'Angleterre est défendu en France; elles entrent en contrebande. L'Angleterre a, sur cet objet d'industrie, un avantage infini sur la France, dont les établissemens dans ce genre sont si inférieurs à tous égards, qu'ils ne peuvent entrer en comparaison."—(Observations, &c. p. 133.)

"L'Angleterre possède absolument l'objet de quincaillerie; et est depuis long temps en possession d'en approvisionner, en contrebande, la France, qui est si arriérée dans ce genre d'industrie, qu'à peine est elle en état de se suffire pour les objets les plus grossiers."—(Recherches sur ce qui est relatif aux étoffes de Cotton, aux Quincailleries, &c. Quatrième Mémoire relatif au Traité de Commerce, p. 37.)

expected that the hardware, comprehending all works in steel and iron, may be mutually admitted by the two countries at a moderate rate of duty."—Reply of Mr Eden, p. 132.

"The importation of the hardware of England is prohibited in France. Great quantities of it, however, are smuggled into that country. England has, in the manufacture of those articles, an infinite advantage over France, whose manufactories of these goods are so far inferior in every respect, that they cannot stand a comparison."—Observations on the Reply of Mr Eden, p. 133.

"England possesses a complete superiority in the manufacture of hardware. For a long time she has been accustomed, by means of smuggling, to supply France with those articles, who is so far behind hand in this manufacture, that she is scarcely in a condition to supply herself even with the most common and coarse articles."—Research into what relates to the manufactures of Cotton and Hardware. 4th Memoir on the Effects of the Commercial Treaty, p. 37.

No. XV. (Page 343.)

Extrait d'une Lettre de M°. la Marquise de * * à M. * *. Du 17. Août 1767.

"J'ai fait une route superbe jusqu'à Poitiers, par Orléans, Blois, Tours, et Poitiers, ou pour mieux dire, jusqu'aux Ormes de M. d' Argenson; car des Ormes à Poitiers, il y a beaucoup de terrein qui ne rapporte rien, et depuis Poitiers jusque chez moi, il y a vingt-cinq mille arpens de terrein qui ne sont que de la brande et des joncs marins; les Paysans y vivent de seigle, dont on n'ôte pas le son qui est noir et lourd comme du plomb; dans la Poitou et ici, on ne laboure que l'épiderme de la terre avec une petite vilaine charrue sans roues, dont je ne puis vous faire la description, qui oblige l'homme d'être presque couché comme une bête à quatre pattes, cela fait pleurer à voir. Chez moi cette affligeante charrue va avec deux bœufs très doucement, en Poitou elle va avec deux ânes. Depuis Poitiers jusqu'à Montmorillon, il y a neuf lieues qui en valent seize de Paris, et je vous jure que je n'ai vu que quatre hommes,

TRANSLATION.

EXTRACT of a Letter from the Marchioness of ** to M. **. Dated 17th August 1767.

"I travelled through a fine country to Poitiers, by Orleans, Blois, and Tours, to Poitiers, or rather, I may say, till I reached the elms of M. Argenson; for from these elms to Poitiers there is a great deal of ground that carries nothing, and from Poitiers to my house there are twenty-five thousand acres that carry nothing but brushwood and sea-rushes. The peasantry live on bread made of rye, from which the bran is not abstracted, which is black, and as heavy as lead. In Poitou as well as here, they only scratch the mere surface of the earth with a little nasty plough without wheels, which I can hardly describe to you; it obliges the man to be almost on all fours when he is working it; the sight of it makes one miserable. With us this sorry plough is worked with two oxen, and in Poitou with two asses. From Poitiers to Monte moridon they count nine leagues, which are equal to sixteen Paris leagues, and I swear te

et trois de Montmorillon chez moi, où il y a quatre lieues, encore les avons nous apperçus de loin, car nous n'en avons pas trouvé unseul sur le chemin. Vous n'en serez pas étonné dans un tel pays je le suis fort que ces pauvres Métavers ne fuient pas tant de malheurs et de misère, et les Propriétaires sont bien heureux qu'un sentiment pour le Pays natal, ou pour mieux dire l'amour conjugal et paternel les empêche de déserter, et de finir une vie si dure et si misérable; on a soin de les marier d'aussi bonne heure que les Grands Seigneurs, le pays n'en est pas plus peuplé, car presque tous les enfans meurent; les femmes n'y ont presque pas de lait, les enfans d'un au mangent de ce pain dont je vous ai parlé; aussi une fille de quatre ans a le ventre gros comme une femme enceinte. Si ces bonnes gens devenoient donc éclairés, les Propriétaires se trouveroient avec beaucoup de terrein réduits à mourir de faim, et il ne seroit plus question des impôts qui écrasent ces malheureux. Les seigles ont été gêlés cette année le jour de Paques, il y a peu de froment. De douze métairies qu'a ma mère, il y en a peut-être dans quatre. Il n'a pas plu depuis Pàques, peu de foin, point de pâturage, aucun légumes, point de fruit; voilà l'état du pauvre Paysan, par

you, that in all that country I only saw four men; and from Montmorillon to my house, which is four leagues, only three, and those we only saw afar off, for we did not meet one person on the road. I do not know whether you are astonished, I am sure I am very much, that in such a country the poor tenantry do not run away from such a state of misery and misfortune. The proprietors are very happy that a prejudice in favour of their native soil, or rather the love of their wives and families, prevents them from deserting, or from putting an end to a life of such hardship and misery. They marry as early as their landlords; but the country is not better peopled on that account; for almost all the children die; the women have hardly any milk; the children at one year old eat that black bread of rye I have mentioned; and a girl of four years old has a belly as big as a woman with child. If these poor people became more enlightened, the proprietors would find themselves possessing great extent of territory, and reduced to die of hunger; and taxes, which reduce these people to absolute misery, would be out of the question. The rye was frost-bit this year at Easter, and they have very little wheat. Out of twelve farms which my mother has, there is, perTaille est ici beaucoup plus forte à proportion qu'en Champagne. Tout le monde dit du bien de M. T * * *, mais on sais qu'il n'est pas le maître de faire tout le bien qu'il désire; ma mère qui avoit toujours plusieurs de ses grêniers pleins, n'y a pas un grain de bled, parceque depuis deux ans elle nourrit tous ces Métayers et les Pauvres, car elle suit la morale de votre doctrine, elle donne à manger à ceux qui ont faim, à boire à ceux qui ont soif, panse les blessés, console les affligés, et mêne une vie plus douce que les plus grandes Dames de la Cour."— (Ephémerides du Citoyen, 1767, Tome Neuvième, p. 146.)

[&]quot;J'ai parcouru une grande partie des provinces de Touraine, de Poitou, du Limosin, de la March, du Berry, de la Xaintonge, de l'Angou-

haps, a little in four of them. It has not rained since Easter; there is no hay, no pasture, no vegetables, no fruit; of course the animals cannot be fattened. Such is the state of the poor peasantry. The poll-tax is higher here than in Champaign. All the world speak well of M. Turgot, but they know he has it not in his power to do all the good he would wish. My mother, who had always several granaries full, has now not a single grain of corn; for during two years she has fed the tenantry and the poor. She, poor woman! follows the old maxim, of giving meat to those who are hungry, and drink to those who are thirsty; she takes care of the wounded, comforts the afflicted, and leads a life of greater satisfaction than that of the finest ladies of the Court."-Ephémerides du Citoyen, 1767, Vol. IX. p. 146.

EXTRACT from the Apology made for the distinction betwixt the Great and the Little Mode of Cultivation, by M. Butré, of the Societies of Agriculture of Paris and Orleans.

"I have gone over a great part of the provinces of Touraine, Poitou, Limosin, Marche, Berry, Xantonge, Angoumois. I have measured

mois; j'ai arpenté plusieurs Domains, j'ai tiré des Mémoires des autres Provinces, j'ai pris les produits et le prix de plusieurs années; on en verra les résultats dans les articles suivants, et on sera sans doute étonné, que, dans toutes les terres de petite culture, il n'y ait presque aucun produit net; que le Roi soit, mais fort à son désavantage, le seul propriétaire de plus de la moitié des terres de son Royaume. La moisson de ces terres suffit à peine pour la subsistance des Cultivateurs; en sorte que ne contribuant point ou très peu à la nourriture des autres classes d'hommes de la Nation, les mauvaises années sont fort redoubtables en France par la disette, qui s'étend jusqu'aux Colons mêmes réduits à cette petite culture, d'où s'en suit, que par rapport à l'état, on peut regarder les terres qui y sont employées à peu pres comme en non valeur; ainsi nous pouvons en ce sens faire remarquer, qu'il y a dans le Royaume beaucoup plus de terres en friches que l'on ne pense."—(*Ibid.* p. 9.)

most of the estates in those countries; I have drawn up memorials from the different provinces; I made accounts of the produce and the price for several years, and the result will appear from the following articles. It will no doubt appear extraordinary, that from all those estates which are cultivated by poor tenantry, without capital, there is almost no sum to be carried to account after paying the expences and taxes; that the King, very much to his disadvantage, is thus the sole proprietor of half the lands in his kingdom. The produce of these lands being scarcely sufficient to subsist those who cultivate them, can in a manner contribute nothing to the subsistence of the other classes in the kingdom. A bad season must of course afflict France with famine that extends itself to all those who are employed in conducting this sorry species of cultivation; from which it follows, that with respect to the State at large, these lands are in a manner of no value, which authorizes us to remark, that there is much more waste land in the kingdom than people think of."-Ibid, p. 9.

CARSE OF GOWRIE.

- "THE Vale or Carse of Gowrie, so much celebrated for its fertility, merits a particular and separate description, which, however, shall be made as concise as possible.
- "This valuable tract is situated in the east corner of the county of Perth, and is every where skirted by high hills, except on the south, where it is bounded by the frith and river of Tay, both of which have been long and justly famed for the great numbers of salmon with which they abound.
- "The Carse of Gowrie, including the sloping lands on the northern boundary, contains about thirty thousand English statute acres. The rent of those farms which have been let within these eight or ten years, may be reckoned at rather above 35s. the English acre.
- "The soil in the vale or plain is a deep rich clay; on the sides of the hills a hazle-coloured loam most generally prevails. In stating the gross annual produce of the soil, (which, it is believed, is equal in quantity and value to any other district of similar extent in Britain, the vi-

cinity of large cities or manufacturing towns only excepted,) it may be proper to observe, that the mode of cropping generally approved of, and now for the most part adopted, is, 1. Fallow; 2. Wheat; 3. Pease or beans; 4. Barley with red clover, and a small quantity of ryegrass; 5. Grass; and 6. Oats; and as all the crops are cultivated in equal proportions, the following table will show, not only the average returns, but also the prices at which they have been sold for a number of years bypast; and may at the same time be depended upon, as being more correct in regard to data than tables of this kind generally are.

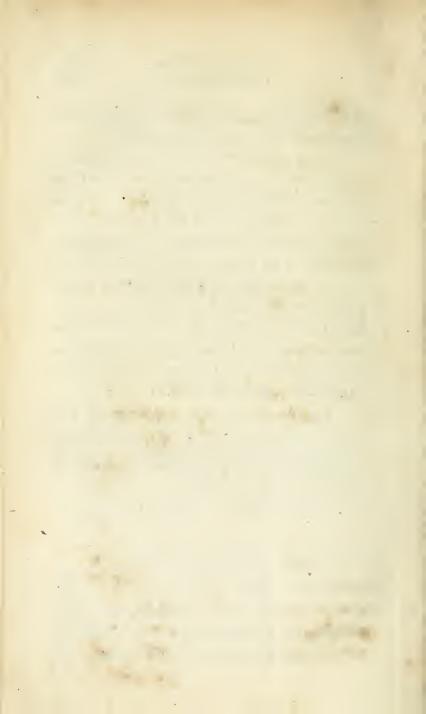
"A TABLE, exhibiting the Extent and Value of the annual Gross Produce of the Carse of Gowrie, supposing it to contain 30,000 English Acres, and to be all cultivated agreeable to the Rotation above mentioned.

	Rotation and number of Acres.	Average produce per acre in Bushels.	Total produce in Winchester quarters.	Average prices per quar- ter,	Total crop of hay, in stones of 22 lb. Amsterdam.	Average price of hay per stone.	Value i		Mo-
				s. d.			L.	s.	d.
1	5000 fallow, 5000 wheat, 5000 p ea s		16,875	43		-	36,281	5	0
1	or beans, 5000 barley,	23 38	14,375 23,750	27 4 21 10		_	19,645 25,927	16	8
1	5000 grass, which may average 140 stone		20,100				20,921	•	0
	of hay per acre,	-		_	700,000	7d.	21,416		4
E	roduce of	46	$29,062\frac{1}{2}$	20 4		_	29,546	17	0
-	orchards,	-	-	-	-	-	1000	0	0
3	0,000 acres		84,062		700,000		132,817	13	8

"By this table, it appears that the annual gross produce of grain in this district may be estimated at upwards of eighty-four thousand Winchester quarters. But as on many farms rotations of cropping are adopted, whereby more than one-sixth part is every year under wheat,

it is probable that the value of the crops is rather above than below what is stated.

- "In no part of the island are more luxuriant crops of red clover to be seen than in the Carse of Gowrie. The second crop is frequently made into hay, and the third is often mown, for the purpose of feeding the horses in the stable, and the cattle in the straw-yards.
- "As the inhabitants of the district do not exceed eight thousand, it is evident that the exports of grain must be very great indeed. Glasgow is the principal market, though large quantities are also sent to London, Leith, and other places on the south-east coast.
- "The size of the farms are in general from one to three hundred acres; but the greatest proportion is occupied by farmers who possess upwards of two hundred acres."



AN ACCOUNT of the TOTAL AMOUNT of the NATIONAL DEBT in each Year, from the 1st February 1786 to the 5th January 1818; stating the Amount of Debt contracted, the Amount of Debt redeemed, and also the Total Amount of Unredeemed Debt in each of those Years.

		GREAT	BRITAIN.			TRELA funded in GRE			
	Total Amount of DEBT.	DEUT contracted in each	DEIT redeemed in each Year, including 5 per Cents, 1797 paid off,	Total unredeemed DEBT.	Total Amount of DEBT.	DEHT contracted in each Year.	DEBT redeemed in each Year.	Total unredermed DEHT.	
	Co.1.	Co. 3-	Co. 3.	Co. 4.	Co. 5,	('o, 6,	Co. 7.	Co. 8.	
Amount at 1st August - 1786	£ 238,231,244			£ 238,231,218					
3 tween 1st Aug. 1786 and 1st Feb. 1787	238,231,218		£ 662,750	237,568,498					
1788	238,231,118		1,456,900	236,111,598					
1789	238,231,248		1,506,350	234,605,248					
1790	238,231,248		1,559,850	233,046,398					
1791	238,231,248		1,587,500	231,458,898					
1799	.38,251,218		1,507,100	229,951,798					
179.	258,231,248		1,962,650	227,989,148					
1794	214,481,248	£ 6,250,000	2,174,405	232,064,743					
1795	260,15°,773	15,676,125	2,804,915	214,936,327					
1796	511,868,471	51,705,035	5,083,455	293,558, 66 346,113,465					
1797	368,809,040	56,915,169	4,390,670		0	0	6 4 5 40 4	0.000.00	
1798	394,159,040	25,.50,000	6,695,585	364,767,580	£ 2,925,000	£ 2,925,000	£ 15,404	£ 2,909,596	
1799	429,783,290	35,621,.50	7,779,807	392,612,323	6,925,000	4,000,000	96,530	6,810,066	
1800	451,65%,290	21,475,000	20,211,571	391,275,752	12,175,000	5,250,000	130,1%5	11,932,881	
1501	450,703,290	49,045,000	10,281,776	413,038,977	15,315,000	3,140,000	233 360	11,839,521	
1802	534,657,603	55,954, 13	9,925,789	159,067,551	19,708,750	4,39.5,750	31 ,928	18,922,343	
1803	567,008,978	30,551,75	8,510,150	480,572,176	22,545,000	2,639,250	337,008	21,724,585	
1804	553,008,978	16,000,000	12,404,854	451,162,622	25,518,000	3,700,000	472,256	23,952,329	
1805	603,925,792	20,916,514	11,951,711	497,127,726	33,738,000	8,190,000	579,428	31,562,901	
1506	640,75.,103	36,526, 11	12,073,475	517,280,561	38,398,000	4,660,000	758,819	55,484,052	
In this and the following Years	04.3.043100	Doi: 14 alt 11	12,000,000	011114	0 0 1 1 1 1 1 1	1,0.30,000	,,	00,100,000	
the Debt is shown, after de ductus, the 5 per cents, 1797, paid off in each Year.	670,632,163	29,580,000	14,085,017	533,073,543	\$1,718,000	3,320,000	807,393	\$7,996,659	
1805	654,005,305	18,373,200	18,672,717	536,726,026	47,139,625	5,421,625	907,585	12,510,699	
18 9	70.,698,556	13 69 1,2 13	11,729,927	535,711,052	50,091,000	2,954,375	951,153	44,513,611	
1810	725,975,678		15,061,321	541,957,854	53,691,000	3,600,000	1,013,577	47,100,034	
1911		21,275,122				7,580,250	1,135,716		
1811	713,787,785	19,511,147	16,106,263	545,662,698	61,274,250	7,100,2311	1,133,710	53,544,568	
Ir clodes Loan 1811, raised for Ir and, chargeable on Great 1812	775,0 12,496	(a) 29,211,711	15,622,590	556,284,819	61,274,250	Included in Gr. Britain.	1,356,276	52,188,292	
1513	919,775,527	10,713,031	21,816,457	575,211,392	68,930,950	7,656,000	1,567,511	58,276,751	
1814	907,495,950	93,720,425	24.71.5,646	641,168,169	79,130,250	10,200,000	1,798,4.34	66,678,317	
115	932,281,880	21,705,950	1 1,799,863	649,074,235	86,472,730	7,342,500	1,812,122	72,208,695	
1916	1,003,090,282	70.188, 112	20,617,122	699 315 516	103, 132,750	16,560,000	2,316,690	86,452,005	
1817	1,006,090,252	3,000,000	19,546,201		103,032,750	10,70,7000	2,507,101	53,941,904	
Great Britain and fre-)	140,00,000,202	3, 00,000	19/340/201	682,769,311	103,032,730		2,001,101	09/34 6/30/8	
Lind of the lated by - *5th Jin. 1818 5 1 Geo. 111. c. 98.	1,109,123,032	_	18,512,227	748,201,991		_	_	_	
(a) The above Debt of Ireland is exclusi	ive of L.1,900,900	Irish 5 per cents.		nus 3 and 7 have 1		and £			
payable in England-				transferred as follo	113:	328,274,369			
By 57th Geo. 111. c. 48. the Sinking F January in each Year, instead of the			By the Sinking I Land Tax Late Annuitio			25,389,233			
Note'The above Sums in columns 1, 2	, and 3, after the	year 1806, differ	Stock, the d	ividends due upoi claimed 10 years ai	nd upwards	222,037			
from the Return made from this of consequence of the 5 per cents. 17	fice on the 13th of	Echinary last in	Purchased with	melamed Dividen	ds	318,600	The Sums in co		
Account.	Para on, bett	6 metaden in his	5	per cents, 1797 păi	d off •	558,557,624 2,305,417 360,921,031	amount to L.560,921,010 The difference mises from the fractional parts of a pound being omitted.		
			}			200000000000000000000000000000000000000	- pound being	Cuntificate	



STATE of the Annual Expence necessarily laid out in the Management of a Farm in the Carse of Gowrie, consisting of 272 Acres, and that for Six Years, beginning at July 20, 1787, and ending at July 20, 1798; the Expence stated being totally unconnected with the Maintenance of the Farmer and his Family.

Years.	Rent.	Seeds of corn	Servant	s' Wages.	Mea	used.	Horses'	Smith	Work.	Wright	Work.	1			1	1	1
		and grass.	Farm Servants.	Shearers.		Price.	maintenance.	Iron, nsils, &c.	Smiths' accounts.		Wrights' accounts.	Threshing mill.	Saddlery account.	Lime for manure.	Ropes bought.	Petty disbursements.	Totals of expenditure.
1788 1789 1790 1791 1792 1793		L. s. p. 196 3 6 203 2 4 237 1 6 229 1 1 213 11 10 253 1 10	L. s. D. 81 10 0 77 10 8 94 11 8 77 19 0 83 10 6 72 16 6	34 14 0 36 4 7½ 40 14 4½ 37 3 11 43 17 0	u. F. P. 92 1 0 90 1 3 84 3 2 89 2 0 78 2 0 75 1 0	L. s. D. 73 16 0 58 13 6 67 12 0 71 12 0 62 16 0 63 18 9	t04 19 3 117 1 0 130 9 3 t37 18 6 151 11 0	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	5 9 5 7 17 9 9 10 0 9 15 0	2 3 6 4 19 1 3 10 7	9 10 0 6 17 0 6 5 4	10 0 0 10 0 0 10 0 0 10 0 0	13 5 8 2 1 0 3 17 4 0 1~ 10 0 0 0	37 10 0 40 6 10 46 15 8 none. 25 5 0	1 15 0	$\begin{bmatrix} 31 & 16 & 6\frac{1}{2} \\ 23 & 8 & 10 \\ 22 & 7 & 1 \\ 24 & 15 & 2 \\ 22 & 14 & 4 \end{bmatrix}$	613 10 9 587 2 1 683 16 1 616 17 5 653 2 4
Div. by 6,		1532 2 1	487 18 4	241 9 1	510 3 1	398 8 3	907 3 10	38 17 7	61 1 21	21 4 7 5	6 3 8	60 0 0	21 11 0	149 17 6	11 15 9	156 5 11	3943 18 0
gen, aver.		222 4 $1\frac{1}{6}$	81 6 42	40 4 10	85 0 21	66 8 01	151 4 0	6 9 7	10 3 6	3 10 9	9 7 $3\frac{1}{2}$	10 0 0	3 11 10	24 19 6	1 19 3	26 0 10	657 6 4

"As the rent of any particular farm would not apply to the country at large, it was judged proper to avoid stating it in this table,

"The annual expense of the farm, on an average of six years, is, by the above state, L, 657, 6s. 4d. exclusive of rent; and which, divided by 272, the number of acres, gives L. 2, 8s. 4d. as the expense of culivating each acre.

trating each acre.

"The charge made for the maintenance of the farm horses is for corn and hay, which could have been sold at the prices charged. The threshing mill is charged at L. 10 a year, which includes interest of money and annual repairs. No interest is charged for the money sunk in stocking the farm, which may amount to L. 1500.

"Petty disbursements comprehend the expence of harvest beer, expences attending the delivery of grain, hiring of servants, and every other charge that can properly apply to the farm."—View of the Agriculture of the Carse of Gowrie, by Mr James Donaldson, p. 38.

AVERAGE PRODUCE per Acre of each Species of Crop, on a Farm in the Carse of Gowrie, for Six Years, commencing with Crop 1787, and including Crop 1792; and also the average Prices at which they were sold in each of these Years.

Ī	Crops.			Who	eat.					Barl	ey.					Oats				P	eas at	nd B	eans.			F	arly	Peas			7	otal.			P	otatoe	5.		H	ay.			F	lax.	
	In years.			pro- acre.	Ave	rage per bol	price	Avei	per	pro- acre.	Ave	erage p er bol	rice L	Ave duce	rage p per a	ere.	Avera per	ge pri boll.	ce A	verag uce pe	e pro	o- e. 1	Averaş orice po boll.	ge er	duc	erage :	pro-	Ave	rage p er boll			rage o	į.		ge pro er mea	-	Averag price pe boll.		Average produce per acre.	pri	rerage ice per ne.	z	Average produce per acre.	A ve price stone	per
	1787 1788 1789 1790 1791 1792	6 7 9 6 7	F. 3 1 1 3 3 - 2	P. O O O O O O O O O O O O O O O O O O O	1	s. 2 1 3 2 0 2	D. 1310 4 6 6 6 6 6 6 7 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1	B. 6 9 6 8 10 5	y. 3 3 3 1 1	P. 0. 3. 3. 3. 3. 0. 0	L. 0 0 0 0 0	s. 14 13 16 15 18	5. 5.1 2 8 5. 6.3 6.4	9 11 9 11 10	F. 0 2 1 1 0 0 0	P. 0 1 0 1 0 1 0 2 1 0 2 3 0 0	0 1 0 1 0 1 0 1 0 1 0 1	4 9 2 10 5 9 4 8 5 2	1	B. F 7 3 6 2 5 3 6 3 1 1	2 0 0 0 1	. -	s. 12 10 14 14 12 18	9.10 9.10 9.10 9.10 9.11 9.11 9.11 9.11	1	F. none. none. 0 1		Pras bea 0 0	s. rice s. peas ns. 14 12 18	ame		F. 1 0 0 0 0 0 1	P. 11 21 1 0 2 11 2	B. 51 75 62 48 70 53	1 0 0 0 0 0		s. ot sta 0 4 0 4 0 6 0 4 0 8	D. ted. 81 71 0 0 21 11 4	Stone. 200 100 266 83 200 187		S. 1 0 0 0 0 0	6 5 7 6 6 0	13 16 26 18 13 34	L. S. 0 19 0 19 0 19 0 19 0 19	2 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
	Div. by 6.	45	2	1	6	12	1	47	2	2	4	17	$3\frac{1}{2}$	59	1	2 <u>.</u>	4	9 11	3 4	3 1	0	344	3	9	20	1	$0\frac{1}{2}$	0	0	0	17	0	$O_{\overline{2}}^{\frac{1}{2}}$	362	3	0 1	7	71	1036	0	3	61	1214	3 19	2 0
1	gen. aver.	7	2	1,	1	2	02	7	3	3	0	16	2₺	9	3	21	0 1	5 0		7 1	0	О	13	l I l	6	3	0	0	13	11 <u>t</u>	7	3	$1\frac{1}{2}$	60	2	0 0) 5	61	1723	0	0	7	50}	0 19	0

" N. B.—It should be remarked here, that the above average return from the acre, is upon a farm not under a regular rotation of cropping, and therefore the general average of the crops is considerably less than it would have been, had the farm been cropped in six parts, as formerly mentioned.

"The built of wheat weighs fourteen stone Amsterdam; barley, eighteen stone; oats, from fourteen stone to fourteen stone and a half; and peas and beans, from thirteen to fourteen stone."—View of the Agriculture of the Carse of Gowrie, by Mr James Donaldson, p. 18.

lores, and that for Six Years, beginof the Farmer and his Family.

-	Lime f			Rop boug		disb	Pet: urser	ty nents	To	otals o	of ire.
2	none.	D. 0 10 8	L. 1 1 2 2 2 2	s. 15 4 6 2 2 4	0 5 3 11 5 9	1. 31 23 22 24 22 31	s. 16 8 7 15 14 3	D. 6½ 10 1 2 4 2	L. 613 587 683 616 653 789	s. 10 2 16 17 2 9	D. 9 1 1 5 4
_	9 17	61	1 1	15	9	156	5	$l_{\frac{1}{2}}$	3943	18	0
24	1 19	6	1 1	9	$3\frac{1}{2}$	26	0	10	657	6	4

acres, gives L. 2, 8s. 4d. as the expence of cul-



